

ISBN 978-0-626-37290-3

SANS 10231:2019

Edition 4.2

SOUTH AFRICAN NATIONAL STANDARD

Transport of dangerous goods by road — Operational requirements

WARNING

This document references other documents normatively.

Published by the South African Bureau of Standards
1 Dr Lategan Road Groenkloof ☒ Private Bag X191 Pretoria 0001
Tel: +27 12 428 7911 Fax: +27 12 344 1568

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Table of changes

Change No.	Date	Scope
Amdt 1	2018	Amended to update referenced standards, to update definitions and renumber definitions accordingly, to update the requirements for dangerous goods declaration, and to update the annex on a completed waste dangerous goods declaration (WDGD) or waste manifest.
Amdt 2	2019	Amended to update the table on inspection categories, intervals and requirements and applicability.

Foreword

This South African standard was prepared by National Committee SABS/TC 1060/SC 02, *National committee for standards for dangerous goods including hazardous chemical substances and dangerous goods – Classification, operational requirements and information*, in accordance with procedures of the South African Bureau of Standards, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in March 2019.

This document supersedes SANS 10231:2018 (edition 4.1).

A vertical line in the margin shows where the text has been technically modified by amendment No. 2.

This document is referenced in the Administrative Adjudication of Road Traffic Offences Act, 1998 (Act No. 46 of 1998), the Consumer Act, 2008 (Act No. 68 of 2008), the National Health Act, 2003 (Act No. 61 of 2003), and the National Road Traffic Act, 1996 (Act No. 93 of 1996).

Reference is made in the note to 1.2 and F.1.7 to the "relevant national legislation". In South Africa this means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

Reference is made in 1.3, to the note in 7.4.1 and E.3.8 to the "relevant national legislation". In South Africa for class 1 explosives and class 7 radioactive material, this means the Explosives Act, 1956 (Act No. 26 of 1956), and the Nuclear Energy Act, 1999 (Act No. 46 of 1999), respectively.

Reference is made in 3.1.5, 3.1.6, 3.1.16, 4.3.1, 4.3.2.4(b), 6.1, 6.2.1.1, 8.4.1(c) and table F.5 to the "relevant national legislation". In South Africa this means the National Road Traffic Act (Act No. 93 of 1996). **Amdt 1**

Reference is made in the note to 3.1.7, 3.1.26 and the note to 3.1.27 to the "relevant national legislation". In South Africa this means the National Environmental Management: Waste Act (Act No. 59 of 2008). **Amdt 1**

Reference is made in 4.2.2 and 4.2.5 to the "national relevant authority". In South Africa this means the National Department of Transport.

Reference is made in the note to C.1 (f), table C.4 and E.3.2 to the "relevant national legislation". In South Africa this means the Explosives Act, 1956 (Act No. 26 of 1956).

Reference is made in F.5.3 to the "relevant national legislation". In South Africa this means the National Road Traffic Act (Act No. 93 of 1996) and the Occupational Health and Safety Act (Act No. 85 of 1993).

Annexes A, B, C, D, E and F form an integral part of this document.

Compliance with this document cannot confer immunity from legal obligations.

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Transport of dangerous goods by road — Operational requirements

1 Scope

1.1 This standard establishes rules and procedures for the safe operation and handling of all road vehicles that are used for the transport of dangerous goods in accordance with the load constraints. The procedures include requirements for the consignor, the consignee, the operator, the driver and the qualified person as well as en route procedures, cargo handling, and vehicle inspection requirements.

1.2 The standard covers the following operations for the transport of dangerous goods by road:

- a) loading of the dangerous goods, which is the responsibility of the consignor;
- b) driving of the vehicle that transports the dangerous goods to its destination, which is the responsibility of the operator and the driver; and
- c) off-loading of the dangerous goods, which is the responsibility of the consignee.

NOTE Supervision of the loading, transportation and offloading of dangerous goods should be in accordance with the relevant national legislation (see foreword). A record of all appointees or assignees in terms of the above should be recorded and acceptance confirmed.

1.3 The requirements in the relevant national legislation on explosives (see foreword) and in the relevant national legislation on radioactive material (see foreword) take precedence over the requirements of this standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from the South African Bureau of Standards.

EN 590, *Automotive fuels – Diesel – Requirements and test methods*.

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR): 2013.

International Convention for Safe Container: 1972

SANS 1475-1, *The production of reconditioned fire-fighting equipment – Part 1: Portable and wheeled (mobile) rechargeable fire extinguishers.*

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SANS 1518:2011, *Transport of dangerous goods – Design, construction, testing, approval and maintenance of road vehicles and portable tanks.*

SANS 1567, *Portable rechargeable fire extinguishers – CO₂ type extinguishers.*

SANS 1910, *Portable refillable fire extinguishers.*

SANS 10047, *The testing of motor vehicles for roadworthiness.*

SANS 10187-8, *Load securement on vehicles – Part 8: Dangerous goods.*

SANS 10228, *The identification and classification of dangerous goods for transport by road and rail modes.*

SANS 10229-1, *Transport of dangerous goods – Packaging and large packaging for road and rail transport – Part 1: Packaging.*

SANS 10229-2, *Transport of dangerous goods – Packaging and large packaging for road and rail transport – Part 2: Large packaging.*

SANS 10232-1, *Transport of dangerous goods – Emergency information systems – Part 1: Emergency information system for road transport.*

SANS 10232-4, *Transport of dangerous goods – Emergency information systems – Part 4: Transport emergency card.* **Amdt 1**

SANS 10233, *Transport of dangerous goods – Intermediate bulk containers for road and rail transport.*

3 Definitions and abbreviations

For the purposes of this document, the following definitions and abbreviations apply.

3.1 Definitions

3.1.1

breakdown

any failure that causes an inability to proceed

3.1.2

certified clean

descriptive of a vehicle, freight container or tank container that has carried goods listed in SANS 10228 as dangerous, but is now free from contamination by such cargo and has been certified as such

3.1.3

competent authority

national body or authority designated, or otherwise recognized, for the control or regulation of a particular aspect of the transport of dangerous goods

3.1.4

competent person

person with the necessary skills and knowledge to carry out a specific task

3.1.5

consignee

as defined in the relevant national legislation (see foreword)

NOTE The waste manager is any person that re-uses, recycles, recovers, treats or disposes of waste.

3.1.6

consignor

person who offers dangerous goods for transport in a vehicle referred to in the relevant national legislation (see foreword)

3.1.7

dangerous goods

commodities, substances and goods as given in SANS 10228

NOTE Dangerous goods include waste classified in terms of the relevant national legislation (see foreword).

3.1.8

dangerous goods declaration

DGD

document that describes and quantifies the dangerous goods being transported from a consignor to a consignee

NOTE 1 A consignment note, a delivery note or a waybill may be used as a dangerous goods declaration, provided it contains the information required in annex A.

NOTE 2 A separate dangerous goods declaration for each consignment should be generated by the consignor to reflect a delivery to a specific consignee. A separate waste dangerous goods declaration (WDGD) or waste manifest for each consignment of waste should be generated. A waste dangerous goods declaration (WDGD) can also be used as a waste manifest (see annex B). **Amdt 1**

NOTE 3 Written operational agreements or arrangements to cover the loading, transportation and off-loading may be concluded by the responsible parties listed on the DGD/WDGD, to confirm accepted duties and responsibilities, if deemed necessary by any of the relevant parties.

3.1.9

designated space

container, of colour orange and marked with the word "**DOCUMENTS**", in black, which is securely fixed and cannot be dislodged unintentionally, and in a clearly visible space in the cab so as to be easily accessible from either door or through a broken front window

NOTE The construction of the container and type of material used are not prescribed.

3.1.10

exempt quantity

quantity of dangerous goods (see annex C) which, if not exceeded in the total load, is exempt from the requirements of this standard

3.1.11

incident

occurrence of any extra-ordinary condition or event during the transport or temporary storage of dangerous goods on a public road, which includes incidents such as leakage, spillage, fire or other unplanned events that could endanger the public or potentially cause serious pollution or detriment to the environment whether immediately or delayed, and which results in a reduction in road capacity, or creates a hazard for road users, or if the authorities were involved

3.1.12

involvement of authorities

Amdt 1

direct involvement of the authorities (either the emergency or police services) during the event involving dangerous goods and the evacuation of persons or closure of public traffic routes (roads/railways) for at least three hours owing to the danger posed by the dangerous goods

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3.1.13 large container receptacle with an internal volume of more than 3 m ³	Amdt 1
3.1.14 load constraints exempt quantities, load compatibilities and exemptions applicable to the transport of dangerous goods covered in this standard	Amdt 1
3.1.15 mixed load compatible load of dangerous goods of different classes or different goods of the same class loaded on a vehicle (or both)	Amdt 1
3.1.16 operator person responsible for the use of a motor vehicle for the transport of dangerous goods as defined in the relevant national legislation (see foreword)	Amdt 1
3.1.17 party that contracts the operator person who enters into a contract with the operator for the transport of dangerous goods	Amdt 1
3.1.18 product custodian person who has control of the dangerous goods at a particular time, but does not necessarily own the goods	Amdt 1
3.1.19 product manufacturer person who manufactures or produces the product	Amdt 1
3.1.20 product owner person who has legal ownership of the product at a particular time	Amdt 1
3.1.21 qualified person person trained to perform a specific task, and nominated by the operator, the consignor or the consignee	Amdt 1
NOTE The singular (person) also includes the plural.	
3.1.22 small container receptacle with an internal volume of not less than 1 m ³ , and not more than 3 m ³	Amdt 1
3.1.23 stopping bringing to a standstill of a vehicle to a parked position by the driver thereof	Amdt 1
3.1.24 transport emergency card card which is generated in accordance with SANS 10232-4	Amdt 1

3.1.25

UN No.

United Nations number

unique four digit number allocated to an item of dangerous goods listed in SANS 10228

3.1.26

waste

as defined in the relevant national legislation (see foreword)

Amdt 1

3.1.27

waste generator

any person whose action, production process or activities, including waste management activities, result in the generation of waste

Amdt 1

NOTE Waste management activities include activities (i.e. re-use, recovery, treatment or disposal of waste) that are defined in the relevant national legislation (see foreword)

Amdt 1

3.2 Abbreviations

DGD dangerous goods declaration

GVM gross vehicle mass

IBC intermediate bulk container

PG packing group

PrDP-D professional driving permit dangerous goods

WDGD waste dangerous goods declaration

4 Responsible parties

4.1 The consignor

NOTE The consignor can be the product manufacturer, the product owner, the product custodian or the party that contracts the operator.

The consignor of dangerous goods for transport by road vehicle shall be responsible for ensuring that

- a) goods are correctly classified, in accordance with SANS 10228,
- b) goods are packaged in accordance with SANS 10229-1 and SANS 10233,

NOTE Imported dangerous goods that arrive by air and that are packed in accordance with the International Civil Aviation Organization (ICAO) technical instructions for the safe transport of dangerous goods by air or the International Air Transport Association (IATA) dangerous goods regulations, or that arrive by sea and are packed in accordance with the International Maritime Dangerous Goods (IMDG) code of the International Maritime Organization (IMO), are acceptable for inland transport by road or rail, provided that marking for the UN number and shipping name are displayed in English.

- c) loading of the dangerous goods is carried out by a qualified person(s) trained in the relevant procedures,
- d) the driver is provided with a copy of the signed DGD/WDGD (5.1 and annex A and annex B), and

- e) the placards and transport emergency card(s) are supplied to the operator, or alternatively the information with regard to the correct placards and transport emergency card(s) are supplied to the operator, in order to enable the operator to provide the relevant placarding and transport emergency card(s).

4.2 The operator

4.2.1 The owner of a motor vehicle is the operator thereof, unless he/she has concluded an agreement with another person or company in relation to the operation of the vehicle. In the case of such an agreement the person or company identified as such in the agreement is deemed to be the operator for the duration of that agreement.

4.2.2 The vehicle shall display a valid dangerous goods operator card issued by the relevant national authority (see foreword).

NOTE This operator card is also considered an operator registration.

4.2.3 The operator shall agree on a basic route with the driver, incorporating any specific requirements of any local authority en route. The operator shall inform the local authority of the areas through which the vehicle will pass, and shall provide them with full information regarding the product to be transported (when requested by the local authority), the nature of its hazard, and the intended route. When the nature of business requires the transport of similar cargo on a regular basis, it will be sufficient to submit this information at the start of operations only. The operator shall, however, inform the appropriate local authority of the discontinuation of such operations and of any change in the operations that might influence the hazard.

The local authority, if concerned about a particular product passing through a specific area may require the operator to use alternative routes to reach his destination.

4.2.4 The operator shall ensure that the driver of a heavy vehicle is in possession of a valid professional driving permit dangerous goods (PrDP-D), and has been trained in accordance with 4.3.1.

4.2.5 The operator shall, on being informed of an incident involving one of his vehicles covered by this standard, ensure that the relevant emergency services and the police have been informed. The operator shall prepare an incident report in accordance with annex D and submit it to the relevant national authority (see foreword) within 30 d. The operator shall also retain the incident report for a minimum of five years.

The relevant emergency services shall be notified by the operator before any transfer of cargo between the scheduled loading and off-loading points. A competent person shall supervise the transfer of cargo.

NOTE Where a vehicle transporting dangerous goods has been stopped and found to be overloaded, it can in some cases be safer to allow the vehicle to proceed under the escort of the emergency services to another site, where transfer of the load can be carried out without undue risk.

4.2.6 If a vehicle is involved in an incident in which there is the risk of damage to its cargo containment, the operator shall submit the vehicle for inspection in accordance with the requirements of the relevant standard(s) valid at the time of manufacture of the vehicle (see also 6.2.1.1), and for compliance with SANS 10047, before putting the vehicle back into service for the transport of dangerous goods.

4.2.7 The operator shall ensure that safety equipment required by the driver in accordance with the transport emergency card, is provided, and that the driver is trained in the operation of such equipment.

4.2.8 The operator shall be responsible for ensuring that the vehicle and equipment fitted to the vehicle complies with all applicable statutory requirements with regard to

- a) the applicable vehicle design standard, in accordance with clause 6,
- b) the vehicle roadworthiness and its suitability to the consignment to be carried, and
- c) the serviceability of the consignment handling equipment and consignment containment areas.

4.2.9 The operator shall be responsible for ensuring that measures are put in place to prevent vehicle overloading and underloading.

4.2.10 The operator shall be responsible for ensuring that the vehicle and equipment are maintained and inspected by a competent person, in accordance with this standard.

4.3 The driver

4.3.1 Skills and training

The driver of a dangerous goods vehicle shall

- a) have a PrDP-D and shall carry it on his person, where required in terms of the relevant national legislation (see foreword),
- b) be fit to drive in terms of the relevant national legislation (see foreword),
- c) be able to interpret and implement the instructions on the transport emergency card,
- d) receive annual comprehensive theoretical and practical training relevant to the type of vehicle and to the dangerous goods which will be assigned to him, including training in the procedures specific to the cargo, for example flammable liquid or toxic corrosive liquid,
- e) carry a valid training certificate or a certified copy of the training certificate, and
- f) receive training to perform pre-journey vehicle inspections to determine roadworthiness as required in 4.3.2.2.

NOTE The annual training of both light and heavy vehicle drivers should be conducted by accredited and approved providers in terms of the relevant national legislation (see foreword).

4.3.2 Checks

4.3.2.1 General

Before proceeding on the route, the driver shall carry out the checks in 4.3.2.2 to 4.3.2.4 (inclusive).

4.3.2.2 Pre-journey-checks

Before driving to the loading site, the driver shall ensure that

- a) a valid dangerous goods operator card is displayed, as required by the relevant national legislation (see foreword),

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- b) at the start of his journey, or after every overnight stop, by going through the checklist as given in E.2, the vehicle is fit for use, and
- c) the vehicle is free of any product likely to contaminate the load or create a safety hazard.

4.3.2.3 Pre-loading checks

At the loading site, before loading is commenced, the driver shall ensure that

- a) the site appears suitable for the operation,
- b) the vehicle is positioned as directed for loading, and
- c) permission has been given for loading to commence.

4.3.2.4 Post loading checks

At the loading site, on completion of loading, the driver shall ensure that

- a) the correct transport emergency card(s) and DGD(s)/WDGDs are stored in the designated space,
- b) only emergency information documents for the current load and licences and permits as required by the relevant national legislation (see foreword), are stored in the designated space, and all extraneous documentation is removed,
- c) the necessary safety equipment in accordance with the transport emergency card(s) is on board,
- d) he understands the information and instructions on the transport emergency card(s),
- e) the orange warning diamond and relevant placards are in place, and
- f) the vehicle is not overloaded or underloaded to present a safety risk, and the load is properly secured (see 8.1).

4.3.3 En route

The driver shall follow the en route procedures given in 5.3.

4.3.4 Other activities

The driver shall at no stage of the transport operation participate in any activity not related to the transport operation.

4.4 The qualified person

4.4.1 General

The loading and offloading operations shall be carried out by a qualified person trained in the relevant procedures.

NOTE Requirements for loading points at warehouses and storage areas are given in SANS 10263 (all parts).

4.4.2 Requirements that relate to loading and offloading operations

The qualified person shall ensure that the following safety precautions are adhered to:

- a) The vehicle is correctly parked for loading or offloading, and wheel chocks, as specified in SANS 1518, are in place for heavy vehicles with a gross vehicle mass (GVM) equal to or greater than 3 500 kg and are placed appropriately under wheels on non-steering axles. Where extinguishers are not provided by the loading/offloading point, vehicle fire extinguishers are placed at an easily accessible position of the vehicle carrying class 1 to class 4 dangerous goods.
- b) The engine of the vehicle is switched off, except where the engine is required to drive pumps or hydraulic units for the purposes of loading or offloading.
- c) The area is safe, with barricades, where applicable, and the necessary warning signs are clearly displayed.
- d) The requisite safety and first aid equipment in accordance with the transport emergency card(s) is provided.
- e) The loading or offloading operation is conducted in a safe manner and is not placed at risk by other activities in the vicinity.
- f) The load is secured (see 8.1).

4.4.3 Requirements that relate to loading operations

The qualified person shall ensure that the following safety precautions are adhered to:

- a) the goods to be loaded are correctly classified, packaged and labelled;
- b) the vehicle is suitable for its current purpose and is clean and fit to load;
- c) if goods different from those previously transported by the vehicle are to be loaded and in the absence of a certificate of cleaning, or a gas-free certificate, the containment area is inspected by a competent person to ensure that it is fit to receive the goods without risk;
- d) the exempt quantity and compatibility requirements (see clause 7 and annexes C and E) are adhered to;
- e) the correct quantity is loaded (see annex C and SANS 1518), and complies with annex E;
- f) the cargo is undamaged and secured (see 8.1);
- g) the vehicle is not allowed to proceed on its journey without placards that reflect the correct information relevant to the goods;
- h) the driver has the correct transport emergency card(s) in his possession;
- i) the necessary DGD(s)/WDGDs are issued for the load and supplied to the driver; and
- j) the special P, B, L and O provisions in annex C are adhered to.

4.4.4 Requirements that relate to offloading operations

The qualified person shall ensure that

- a) the cargo is correct and undamaged and there is no obvious spillage,

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- b) the offloading operation does not proceed, if, for any reason, he/she considers it unsafe,
- c) in the case of bulk deliveries,
 - 1) there is sufficient space in the tanks or bins into which the cargo is to be unloaded and that they are in a fit condition to receive the load;
 - 2) the flow can be stopped immediately in case of leakage or any other emergency; and
 - 3) after offloading, the vehicle is free from spillage and all valves are closed,
- d) after offloading, the documents reflect the change in load,
- e) after offloading no residue remains on the vehicle and that the vehicle is free of contamination,
- f) if after offloading the vehicle cannot be certified clean, the placards and relevant documents remain until cleaning of the vehicle is possible, and
- g) at the offloading site the dangerous goods that correspond with the DGD/WDGD, can be offloaded in safe conditions, that all the necessary safety equipment is provided and that he/she consults with the operator and the consignor on appropriate action with regard to containers with leaks.

4.5 The consignee

4.5.1 The consignee shall be responsible for the offloading of the dangerous goods.

4.5.2 The consignee shall provide the qualified person to carry out the offloading procedures (unless otherwise agreed upon amongst the responsible parties).

5 Operational requirements

5.1 Dangerous goods declaration

5.1.1 The DGD/WDGD shall comply with the requirements of annexes A and B for a completed DGD/WDGD, and copies of the completed DGD/WDGD (or both) shall be provided to the operator and the consignee by the consignor. The waste generator shall ensure that a separate WDGD is generated to reflect a delivery to a specific consignee (see annex B). **Amdt 1**

5.1.2 The DGD/WDGD shall be stored in the designated space.

5.1.3 The DGD shall be retained by the consignor for a minimum of 90 d after the date of shipment, if no incident is reported. If an incident is reported, the DGD shall be retained for the duration of the relevant investigation. The operator and consignee shall retain copies of the DGD for as long as deemed necessary by the relevant party. If waste is transported, the WDGD shall be retained by the consignor/waste generator, consignee/waste manager, and the operator/waste transporter for a minimum of five years after the date of shipment.

5.2 Insurance

The operator shall ensure that insurance, based on the hazard and risk of the goods or substances transported, covers civil liability, recovery and rehabilitation costs.

5.3 En route procedures

5.3.1 The driver shall not allow any passengers or unauthorized persons to be in or on the vehicle at any stage during the journey.

5.3.2 The driver shall adhere to the agreed route and authorized stopping places, unless directed otherwise by a member of the emergency services.

5.3.3 Where pre-planned stops, for example those required every two hours for tyre and spillage checks, are not in designated places, the vehicle shall stop only in areas sufficiently far away from the main traffic flow so as not to present a risk to other road users.

5.3.4 A vehicle that carries dangerous goods shall be under constant supervision while stopped or parked if one or both of the following applies:

- a) the dangerous goods carried have an exempt quantity of 10 kg or 10 L, or less; or
- b) any one or more of special provisions O14 to O20 (inclusive) in C.5 applies.

NOTE Constant supervision is the supervision of a vehicle transporting dangerous goods either by the vehicle driver or a qualified person in the employ of the operator, or the parking of the vehicle in a secure area authorized by the operator.

5.3.5 The opening of packages, unloading or decanting for any reason, for example for axle overloads, shall not be permitted, except in an authorized and properly equipped area under the supervision of a qualified person, and after the operator has been informed.

5.3.6 In the event of a mechanical breakdown, regulatory warning triangles shall be placed on the road and the operator shall be informed immediately.

5.3.7 In the event of an incident, the instructions on the transport emergency card(s) shall be followed and all necessary assistance shall be given to the emergency services. The transport emergency card(s) and the DGD(s)/WDGDs shall be handed over to the emergency services when so requested.

5.3.8 Good driving practice with anticipation of potential problem situations shall be exercised at all times.

5.4 Equipment to be carried on the vehicle

5.4.1 Fire extinguishers

5.4.1.1 Vehicles shall be fitted with the following portable, dry powder type fire extinguishers (or an equivalent capacity of any other suitable extinguishing agent) suitable for inflammability classes A, B and C:

- a) For truck tractors: 1 × 9 kg minimum externally mounted fire extinguisher.
- b) For freight carriers (with fixed or demountable tanks or for packaged goods): 2 × 9 kg minimum externally mounted fire extinguishers.
- c) For trailers: 2 × 9 kg minimum externally mounted fire extinguishers.
- d) For light motor vehicles (less than 3 500 kg GVM): 2 × 4,5 kg or 1 × 9 kg.

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5.4.1.2 All fire extinguishers shall be mounted in easily accessible, quick-release holders, in an area where they are protected against negative environmental and operational influences such as corrosive products.

5.4.1.3 All fire extinguishers shall be provided with

- a) a seal verifying that the extinguisher has not been used,
- b) a gauge or indicator that clearly indicates whether the extinguisher is ready for use at the required operating charge pressure,
- c) a label showing last test date, period of validity and next test date. The label shall be applied in a position where it shall remain legible for the entire validity period, and
- d) a mark indicating compliance with SANS 1910 or SANS 1567, as applicable.

5.4.1.4 The fire extinguishers shall be maintained, tested and labelled periodically, in accordance with SANS 1475-1.

6 Vehicle requirements

6.1 Vehicle registration

The vehicle shall be recorded for the transport of dangerous goods in compliance with the relevant national legislation (see foreword).

6.2 Vehicle inspection

NOTE The term "tank" includes fixed tanks, demountable tanks and battery vehicles tank containers, swap bodies, portable tanks, multiple-element gas containers (MEGCs) and vacuum operated tanks.

6.2.1 General

6.2.1.1 The design and construction of a vehicle used for the transport of dangerous goods shall comply with the design requirements covered by the relevant standard(s) valid at the time of manufacture of the vehicle, or in terms of the relevant national legislation (see foreword).

6.2.1.2 All goods vehicles used for the transport of dangerous goods shall undergo regular inspection in accordance with annex F. Defects and non-compliance found shall be rectified in order to ensure their sound mechanical condition and ability to operate safely.

6.2.1.3 Regular preventive maintenance shall be built into the working schedule of the operator and shall either be carried out at the operator's depot by suitably qualified staff, or be subcontracted to a workshop under the control of a competent person. The subcontracted workshop shall provide a written report of the inspections performed in accordance with this standard. Detailed records shall be kept of all maintenance and inspection work done on every vehicle. Records shall be retained for the periods indicated in table 1.

The inspection records shall include records of the associated defect repair and non-compliance rectification work carried out.

Table 1 — Maintenance type and corresponding document retention periods

1	2
Type of maintenance activity	Retention period
Daily inspections	6 months
Monthly inspections	1 year
Annual inspections	Life of vehicle
Intermediate periodic inspections	Life of vehicle
Major periodic inspections	Life of vehicle
Exceptional inspections	Life of vehicle
Repairs carried out to tanks and product containments structures	Life of vehicle
Repairs carried out to service equipment	Life of vehicle

6.2.1.4 The inspection schedule given in table F.1 shall be completely restarted in cases where major maintenance or repairs have been done.

6.2.2 Inspection requirements for the goods containment area of vehicles used for the transport of packaged goods, intermediate bulk containers (IBCs), freight containers and portable tanks

6.2.2.1 General

Inspection shall be done by a competent person who shall ensure that

- a) the design and construction of the vehicle used for the transport of dangerous goods comply with the requirements of SANS 1518. If the vehicle was manufactured before publication of SANS 1518, it shall comply with 6.2.1.1,
- b) the packaged goods vehicle is certified clean and free from contaminants,
- c) the dangerous goods operator card is displayed, and
- d) in the case where the cab is fixed to the containment area of the vehicle, a designated space for documents has been provided.

6.2.2.2 Inspection of the goods containment area of a vehicle

Inspection of the goods containment area of a vehicle shall be done by a competent person who shall ensure that

- a) there is no corrosion of, or other visible defect in, the goods containment area or its securement that could render the vehicle unsafe for use,
- b) where appropriate, the accessories carried, such as fastenings and straps, mountings and fittings for securing of freight containers, are of the correct type and fit for use (see SANS 10187-8),
- c) the mounting brackets are correctly fitted to each vehicle, to accommodate the appropriate fire extinguishers, and

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- d) if a self-adhesive decal is not used, suitable brackets are fitted to the vehicle to accommodate emergency warning placards in accordance with SANS 10232-1.

6.2.3 Inspection requirements for the goods containment area of a road tank vehicle

6.2.3.1 General

6.2.3.1.1 The minimum inspection and testing schedule shall be as given in annex F.

6.2.3.1.2 Before a tanker is submitted for testing, it shall be properly cleaned.

6.2.3.1.3 Inspection shall be done by a competent person who shall ensure that

- a) the design and construction of the tank vehicle comply with SANS 1518. If the tank vehicle was manufactured before the publication of SANS 1518, it shall comply with 6.2.1.1,
- b) the dangerous goods operator card is displayed, and
- c) in the case where the cab is fixed to the containment area of the vehicle, a designated space for documents has been provided.

6.2.3.2 Inspection of the goods containment area of a tank vehicle

Inspection of the goods containment area of a tank vehicle shall be done by a competent person, who shall ensure that

- a) the tank manufacturer's data plate is fitted to the tank,
- b) there is no corrosion of, or other visible defect in, the tank, mountings or fittings that could render the tanker unsafe for re-use,
- c) the mounting brackets are correctly fitted to each tanker to accommodate the appropriate fire extinguishers, and
- d) if a self-adhesive decal is not used, suitable brackets are fitted to the tanker, to accommodate emergency warning placards in accordance with SANS 10232-1.

7 Load constraints

7.1 Exempt quantity for a load consisting of items with the same UN number

If the total quantity loaded is less than the quantity (in kilograms or litres, as appropriate) given in column 6 of table C.1, the requirements of this standard do not apply.

7.2 Exempt quantity for a mixed load

If no single item of dangerous goods in the load exceeds the quantity (in kilograms or litres, as appropriate) given in column 6 of table C.1, use the following equation to calculate each item of dangerous goods in the load:

$$A = Q \times F$$

where

A is the result;

Q is the quantity of the dangerous goods being transported, in kilograms (kg) or litres (L), as applicable;

F is the factor shown in column 7 of table C.1.

If the sum of A for all the calculations does not exceed 1 000, the requirements of this standard do not apply.

7.3 Load compatibility

Where more than one item of dangerous goods (mixed load) is transported per vehicle/combination of vehicles, the load shall conform to the requirements shown in the load compatibility chart and special provisions according to the hazard class, in accordance with annex E.

7.4 Exemptions

7.4.1 Exemptions related to the nature of the transport operation

The requirements of this standard shall not apply to the following:

- a) the transport of dangerous goods by private individuals where the goods in question are packaged for retail sale and are intended for their personal or domestic use or for their leisure or sporting activities;

NOTE Dangerous goods in IBCs, large packagings or tanks in excess of exempted quantities are not considered to be for personal or domestic use or for their leisure or sporting activities.

- b) the transport of machinery or equipment not specified in this clause and which contain dangerous goods in their internal or operational equipment, provided that measures have been taken to prevent any leakage of contents in normal conditions of transport;
- c) the transport undertaken by or under the supervision of the emergency services, insofar as such transport is necessary in relation to the emergency response, in particular transport undertaken
 - 1) by breakdown vehicles carrying vehicles which have been involved in accidents or have broken down and contain dangerous goods; or
 - 2) to contain and recover the dangerous goods involved in an incident or accident and move them to a safe place;
- d) emergency transport intended to save human lives or protect the environment provided that all measures are taken to ensure that such transport is carried out in complete safety;
- e) the transport of goods exempt from road transport regulations by special provision in SANS 10228, or in terms of table C.1; and
- f) the goods transported by a bona fide farmer or an employee of the farmer and are intended for use in farming operations, provided that
 - 1) the goods are not used for resale either in their original form or in combination with any other substance,
 - 2) the journey does not exceed 250 km of which no more than 50 km shall be on a main arterial road designated with an N number,

- 3) the quantity of classified dangerous goods in liquid form does not exceed 1 000 L,
- 4) the quantity of classified dangerous goods in solid form does not exceed 1 000 kg, and
- 5) the quantity of classified dangerous goods transported in a mixed load containing goods in both liquid and solid form, in kilograms and litres, does not exceed 1 000.

NOTE These exemptions should not apply to class 1 and class 7 substances. For any applicable exemptions, refer to the relevant national legislation (see foreword).

7.4.2 Exemptions related to the transport of gases

The requirements of this standard shall not apply to

- a) gases contained in the tanks of a vehicle, performing a transport operation and destined for its propulsion, or for the operation of any of its equipment (for example refrigerating equipment), and
- b) gases contained in the fuel tanks of vehicles transported. The fuel cock between gas tank and engine shall be closed and the electric contact open.

7.4.3 Exemptions related to the transport of liquid fuels

The requirements of this standard shall not apply to:

- a) fuel contained in tanks of a vehicle performing a transport operation and intended for the operation of any of its equipment with the following restrictions:
 - 1) when contained in tanks permanently connected to the vehicle's engine or auxiliary equipment (or both), it shall not exceed the quantities specified in table 2; and
 - 2) when contained in portable fuel containers (such as Jerricans), a maximum of 60 L may be carried per vehicle, or combination of vehicles;

Table 2 — Exempted vehicles

1	2
Transport unit	Maximum quantity L
Drawing vehicle	1 500
Combination	1 500
Trailer	500

- b) fuel contained in the tanks of vehicles or of other means of conveyance (such as boats), which are carried as a load, where it is destined for their propulsion or the operation of any of their equipment. Any fuel cocks between the engine or equipment and the fuel tank shall be closed during carriage unless it is essential for the equipment to remain operational. The load shall be loaded upright and secured against falling; and
- c) the goods are moved between adjacent premises, not more than 1 km apart.

8 Cargo handling

8.1 Cargo securement

Cargo securement shall be in accordance with SANS 10187-8, in order to minimize the risk of spillage in the event of the vehicle overturning, or any other incident.

8.2 Packaged goods

The special P, L and O provisions in columns 8, 10 and 11 of table C.1 shall apply.

8.3 Bulk transport

Goods, other than those authorized for carriage in tanks (see SANS 1518) shall not be carried in bulk in vehicles unless a special B provision, explicitly authorizing this mode of transport is indicated, as given in column 9 of table C.1.

8.4 Freight containers that contain packaged goods

8.4.1 When packages that contain dangerous goods are packed into a freight container, the consignor shall provide a container packing certificate which shall be stored in the designated space, specifying the container identifying number and certifying that the packing has been carried out in accordance with the following conditions:

- a) the container was clean, dry and fit to receive the goods;
- b) goods that are incompatible have not been packed together in the same container;
- c) packaging complies with the requirements of the relevant national legislation (see foreword), and international regulations (if applicable);
- d) all packages have been externally inspected for damage or leakage, and that only sound packages have been loaded;
- e) all packages have been properly stowed and secured, with dunnage if necessary, to prevent movement;
- f) the freight container and all the packages therein have been properly labelled and placarded;
and
- g) drums have been stowed in an upright position.

NOTE 1 The consignor can be the product manufacturer, the product owner, the product custodian or the party that contracts the operator.

NOTE 2 The particulars in note 1 will not be readily available on freight containers from outside South Africa.

8.4.2 The container packing certificate may be combined with a DGD/WDGD where the inclusion of a signed declaration phrase such as: "It is declared that the packing of goods into this container has been carried out in accordance with SANS 10231", will suffice. For freight containers packed outside South Africa, reference shall be made to international regulations (see bibliography).

8.4.3 The container packing certificate is not required for tank containers.

Annex A

(normative)

A completed dangerous goods declaration (DGD)

Dangerous goods declaration				Company Logo (optional)		
Consignment Note No.: 101 11X						
Consignor: RA Jones, Jones Warehouse 100 High Rd, Germiston Tel: 011 100 1000				Operator: B Higgins, Higgins Road Freight 200 South Ave, Germiston Tel: 011 200 2000 Reg. no. vehicle: XYZ 200 GP		
Product manufacturer				Consignee: ABC Chemicals, 300 Marine Drive, Durban Tel: 031 300 3000		
Product owner:				Additional information on handling/transport/storage: The package marked with UN XXXX shall be shaded from sunlight		
Product custodian:						
Party contracting the operator: RA Jones, Jones Warehouse 100 High Rd, Germiston Tel: 011 100 1000						
Shipping name	UN No.	Haz class	PG	Quantity and type of packaging	Volume/ gross mass L/kg	Net mass kg
Paint	1263	3	III	2 fibreboard boxes, 4 × 5 L each	52	41,5
Declarations						
<p><i>I hereby declare that the content of this consignment is fully and accurately described above by the proper shipping name, and is classified, packaged, marked and labelled/placarded and in all respects in proper condition for transport in accordance with the relevant national legislation.</i></p> <p>Where the consignor is not the manufacturer, the declaration is based on information received.</p> <p>Consignor : Product manufacturer <input type="checkbox"/> / Product owner <input type="checkbox"/> / Product custodian <input type="checkbox"/> / Party that contracts the operator <input checked="" type="checkbox"/> :</p> <p>Signed: RA Jones Date: 2005-06-20</p> <hr/> <p><i>The consignment described above has been received into my vehicle. My vehicle is correctly placarded and I am in possession of all necessary transport documentation pertaining to the transport of dangerous goods, including information to be followed in case of an emergency.</i></p> <p>Driver</p> <p>Signed: JK Williams Date: 2005-06-20</p>						

Annex B
(normative)

A completed waste dangerous goods declaration (WDGD) or waste manifest

Amdt 1

Waste dangerous goods declaration or waste manifest

Company Logo (Optional)

Consignment identification No./Bar code: 101 11X

Consignor/waste generator	
<p>Consignor/waste generator: R Jones Physical Address: Jones Warehouse 100 High Road Germiston Tel: 011 100 1000</p> <p>Postal address: Box 1477 Germiston 0001</p> <p>Emergency phone: 011 456 1700</p> <p>e-mail: rjones@mwebb.co.za Fax: 011 100 1001 WIS registration number: 00234</p>	<p>Origin/source of waste (process/activity):</p> <ul style="list-style-type: none"> - Product spilt during storage <p>Classification of the waste:</p> <ul style="list-style-type: none"> - Oxidize solid, Carcinogen 1A, Mutagen 1B - Reprod tox 2, Acute tox 2 (inhalation) - Acute tox 3 (dermal), Acute tox 3 (oral) - Skin corr 1A <p>Or refer to attached SDS</p> <p>Quantity (m³ or tons):</p>
<p>Site where waste was generated: Jones Warehouse 100 High Road Germiston</p>	
<p>Date of collection: 23 April 2010</p>	
Declaration of consignor/waste generator	
<p>I hereby declare that the contents of this consignment is fully and accurately described, classified, marked and labelled/placarded and in all respects in proper condition for transport in accordance with the applicable laws and regulations.</p>	
<p>Signed: ----- RA JONES ----- Date: ----- -2010-06-20 -----</p>	
Operator/waste transporter	
<p>Operator/waste transporter: B Higgins Higgins Road Freight 200 South Avenue, Germiston Tel: 011 200 2000</p>	
<p>Vehicle registration number: XYZ 200 GP</p>	
Declaration of operator/waste transporter	
<p>I hereby declare that the classified waste described above has been received into my vehicle. My vehicle is correctly placarded and I am in possession of all necessary transport documentation including information to be followed in case of an emergency.</p>	
<p>Signed: ----- B Higgins ----- Date: ----- -2010-06-20 -----</p>	

Amdt 1

Declaration of consignee/waste manager				
Consignee/waste manager: JK Williams Three Fountains Landfill		Details of waste received by consignee/waste manager:		
Receiving address:	48 No More Road Heidelberg 2345	Type of waste management applied:		
Postal address:	Box 600 Heidelberg 6001	Re-use/ recycling/ recovery/ treatment/ disposal		
Waste management facility license number:	XXX15	Reporting description and code in terms of national waste information regulations: inorganic waste – solid. HW05 - 02		
Telephone number:	011 893 1707	Details of waste diverted: No waste diverted		
		Details of diverting facility (where applicable):		
		Discrepancies in information: No discrepancies		
		Quantity (m³ or tons): 100 kg (0,1 ton)		
Declaration of consignee/waste manager				
Consignee/waste manager:				
I hereby confirm that the hazardous waste described above has been received at the waste site and the waste has been treated and disposed of as indicated.				
Signed:... JK Williams.....			Date... 2010-06-30	
Shipping name: Chromium (VI) oxide	UN number: 1463	Hazard class: 5.1	Packaging group: II	Quantity and type of packaging: 100 kg (0,1 t) – Metal drum
Additional information on the handling/transport/storage – applicable P, B, L, O provisions:				
The package marked with UN 1463 is subject to special provision L24 of SANS 10231.				

Annex C
(normative)

Exempt quantity list and special provisions

C.1 Exempt quantity list

Table C.1 is a list of dangerous goods in numerical order, with their corresponding UN numbers. Explanations for the columns are as follows:

- a) column 1 lists the UN numbers in numerical order;
- b) column 2 contains the shipping name (see note);
- c) column 3 contains the hazard class;
- d) column 4 contains the packing group;
- e) column 5 contains the subsidiary risk;
- f) column 6 contains the exempt quantity (see 7.1 and 7.2);

NOTE For class 1 substances, refer to the relevant national legislation (see foreword).

- g) column 7 contains the calculation factor (see 7.2);
- h) column 8 contains the special P provisions that apply to packaged goods (see C.2);
- i) column 9 contains the special B provisions that apply to goods transported in bulk (see C.3);
- j) column 10 contains the special L provisions that apply to loading operations (see C.4); and
- k) column 11 contains the special O provisions that apply to transport operation in general (see C.5).

NOTE This table does not show alternative shipping names and other qualifying descriptions. For this type of information, see SANS 10228.

Table C.1 — Exempt quantity list

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0004	AMMONIUM PICRATE dry or wetted with < 10 % water, by mass	1.1D								
0005	CARTRIGES FOR WEAPONS with bursting charge	1.1F								
0006	CARTRIGES FOR WEAPONS with bursting charge	1.1E								
0007	CARTRIGES FOR WEAPONS with bursting charge	1.2F								
0009	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.2G								
0010	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.3G								
0012	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.4S			Unlimited		2		2; 3; 9	1
0014	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK or CARTRIDGES FOR TOOLS, BLANK	1.4S			Unlimited		2		2; 3; 9	1
0015	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.2G								
0016	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.3G								
0018	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.2G		6.1 8						
0019	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.3G		6.1 8						

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0020	AMMUNITION, TOXIC with burster, expelling charge or propelling charge	1.2K		6.1						
0021	AMMUNITION, TOXIC with burster, expelling charge or propelling charge	1.3K		6.1						
0027	BLACK POWDER (GUNPOWDER), granular or as a meal	1.1D			5 20	200 50	2		2; 3; 4; 9	
0028	BLACK POWDER (GUNPOWDER), COMPRESSED or BLACK POWDER (GUNPOWDER), IN PELLETS	1.1D								
0029	DETONATORS, NON-ELECTRIC for blasting	1.1B								
0030	DETONATORS, ELECTRIC for blasting	1.1B								
0033	BOMBS with bursting charge	1.1F								
0034	BOMBS with bursting charge	1.1D								
0035	BOMBS with bursting charge	1.2D								
0037	BOMB, PHOTO-FLASH	1.1F								
0038	BOMB, PHOTO-FLASH	1.1D								
0039	BOMB, PHOTO-FLASH	1.2G								
0042	BOOSTERS without detonators	1.1D								
0043	BURSTERS, explosive	1.1D								
0044	PRIMERS, CAP TYPE	1.4S			Unlimited					
0048	CHARGE, DEMOLITION	1.1D								
0049	CARTRIGES, FLASH	1.1D								
0050	CARTRIGES, FLASH	1.3G								
0054	CARTRIGES, SIGNAL	1.3G								
0055	CASES, CARTRIGES, EMPTY, WITH PRIMER	1.4S			Unlimited					
0056	CHARGES, DEPTH	1.1D								
0059	CHARGES, SHAPED without detonator	1.1D								
0060	CHARGES, SUPPLEMENTARY, EXPLOSIVE	1.1D								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0065	CORD, DETONATING, flexible	1.1D								
0066	CORD, IGNITER	1.4G								
0070	CUTTERS, CABLE, EXPLOSIVE	1.4S			Unlimited					
0072	CYCLOTRIMETHYLENE-TRINITRAMINE (CYCLONITE; HEXOGEN; RDX), WETTED with not less than 51 % water, by mass	1.1D								
0073	DETONATORS FOR AMMUNITION	1.1B								
0074	DIAZODINITROPHENOL, WETTED with not less than 40 % water, or mixture of alcohol and water, by mass	1.1A								
0075	DIETHYLENEGLYCOL DINITRATE, DESENSITIZED with not less than 25 % non-volatile, water-insoluble phlegmatizer, by mass	1.1D								
0076	DINITROPHENOL, dry or wetted with less than 15 % water, y mass	1.1D		6.1						
0077	DINITROPHINOLATES, alkali metals, dry or wetted with less than 15 % water, by mass	1.3C		6.1						
0078	DINITRORESORCINOL, dry or wetted with less than 15 % water, by mass	1.1D								
0079	HEXANITRODIPHENYLAMINE (DIPICRYLAMINE; HEXYL)	1.1D								
0081	EXPLOSIVE, BLASTING, TYPE A	1.1D								
0082	EXPLOSIVE, BLASTING, TYPE B	1.1D								
0083	EXPLOSIVE, BLASTING, TYPE C	1.1D								
0084	EXPLOSIVE, BLASTING, TYPE D	1.1D								
0092	FLARES, SURFACE	1.3G								
0093	FLARES, AERIAL	1.3G								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0094	FLASH POWDER	1.1G								
0099	FRACTURING DEVICES, EXPLOSIVE without detonator, for oil wells	1.1D								
0101	FUSE, NON-DETONATING	1.3G								
0102	CORD (FUSE), DETONATING, metal clad	1.2D								
0103	FUSE, IGNITER, tabular, metal clad	1.4G								
0104	CORD (FUSE), DETONATING, MILD EFFECT, metal clad	1.4D								
0105	FUSE, SAFETY	1.4S								
0106	FUZES, DETONATING	1.1B								
0107	FUZES, DETONATIONG	1.2B								
0110	GRENADES, PRACTICE, hand or rifle	1.4S								
0113	GUANYL NITROSAMINO-GUANYLIDENE HYDRAZINE, WETTED with not less than 30 % water, by mass	1.1A								
0114	GUANYL NITROSAMINO-GUANYLETETRAZENE (TETRAZENE), WETTED with not less than 30 % water, or mixture of alcohol and water, by mass	1.1A								
0118	HEXOLITE (HEXOTOL), dry or wetted with less than 15 % water, by mass	1.1D								
0121	IGNITERS	1.1G								
0124	JET PERFORATING GUNS, CHARGED, oil well, without detonator	1.1D								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0129	LEAD AZIDE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	1.1A								
0130	LEAD STYPHNATE (LEAD TRINITRORESORCINATE) WETTED with not less than 20 % water, mixture of alcohol and water, by mass	1.1A								
0131	LIGHTER, FUSE	1.4S			Unlimited					
0132	DEFLAGRATING METAL SALTS OF AROMATIC NITRODERIVATIVES. N.O.S	1.3C								
0133	MANNITOL HEXANITRATE (NITROMANNITE), WETTED with not less than 40 % water, or mixture of alcohol and water, by mass	1.1D								
0135	MERCURY FULMINATE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	1.1A								
0136	MINES with bursting charge	1.1F								
0137	MINES with bursting charge	1.1D								
0138	MINES with bursting charge	1.2D								
0143	NITROGLYCERIN, DESENSITIZED with not less than 40 % non-volatile water-insoluble phlegmatizer, by mass	1.1D		6.1						
0144	NITROGLYCERIN, DESENSITIZED with not more than 40 % non-volatile water-insoluble phlegmatizer, by mass	1.1D								
0146	NITROSTARCH, dry or wetted with less than 20 % water, by mass	1.1D								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0147	NITRO UREA	1.1D								
0150	PENTAERYTHRITETETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN); WETTED with not less than 25 % water, by mass, or PENTAERYTHROTOL TETRANITRATE; PETN) DESENSITIZED with not less than 15 % phlegmatizer, by mass	1.1D								
0151	PENTOLITE, dry or wetted with less than 15 % water, by mass	1.1D								
0153	TRINITROANILINE (PICRAMIDE)	1.1D								
0154	TRINITROPHENOL (PICRIC ACID), dry or wetted with less than 30 % water, by mass	1.1D								
0155	TRINITROCHLOROBENZENE (PICRYL CHLORIDE)	1.1D								
0159	POWDER CAKE (POWDER PASTE), WETTED with not less than 25 % water, by mass	1.3C								
0160	POWDER, SMOKELESS	1.1C								
0161	POWDER, SMOKELESS	1.3C			10 100	100 10	2		2; 3; 5; 9	
0167	PROJECTILES with bursting charge	1.1F								
0168	PROJECTILES with bursting charge	1.2D								
0171	AMMONIUM, ILLUMINATING with or without burst, expelling charge or propelling charge	1.2G								
0173	RELEASE DEVICES, EXPLOSIVE	1.4S								
0174	REVETS, EXPLOSIVE	1.4S								
0180	ROCKETS, with bursting charge	1.1F								
0181	ROCKETS, with bursting charge	1.1E								

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0182	ROCKETS, with bursting charge	1.2E								
0183	ROCKETS, with inert head	1.3C								
0186	ROCKET MOTORS	1.3C								
0190	SAMPLES, EXPLOSIVE, other than initiating explosive									
0191	SIGNAL DEVICES, HAND	1.4G			5 100	200 10	2		2; 3; 6; 9	
0192	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.1G			10 units 50 kg	20	2		2; 3; 8; 9	
0193	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.4S			Unlimited		3		2; 3; 8; 9	
0194	SIGNALS, DISTRESS	1.1G								
0195	SIGNALS, DISTRESS	1.3G			50	20	2		2; 3; 6; 9	
0196	SIGNALS, SMOKE	1.1G								
0197	SIGNALS, SMOKE	1.4G			100	10	2		2; 3; 6; 9	1
0204	SOUNDING DEVICES, EXPLOSIVE	1.2F								
0207	TETRANITROANILINE	1.1D								
0208	TRINITROPHENYL-METHYLNATRAMINE (TETRYL)	1.1D								
0209	TRINITROTOLUENE (TNT), dry or wetted with less than 30 % water, by mass	1.1D								
0212	TRACERS FOR AMMUNITION	1.3G								
0213	TRINITROANISOLE	1.1D								
0214	TRINITROBENZENE, dry or wetted with less than 30 % water, by mass	1.1D								
0215	TRINITROBENZOIC ACID, dry or wetted with less than 30 % water, by mass	1.1D								
0216	TRINITRO-m-CRESOL	1.1D								
0217	TRINITRONAPHTHALENE	1.1D								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0218	TRINITROPHENETOLE	1.1D								
0219	TRINITRORESORCINOL (STYPHNIC ACID) dry or wetted with less than 20 % water, or mixture of alcohol and water, by mass	1.1D								
0220	UREA NITRATE, dry or wetted with less than 20 % water, by mass	1.1D								
0221	WARHEADS, TORPEDO with bursting charge	1.1D								
0222	AMMONIUM NITRATE with more than 0,2 % combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1D								
0224	BARIUM AZIDE, dry or wetted with less than 50 % water, by mass	1.1A								
0225	BOOSTERS WITH DETONATOR	1.1B								
0226	CYCLOTETRAMETHYLENETETRAMINE (HMX; OCTOGEN), WETTED with not less than 15 % water, by mass	1.1D								
0234	SODIUM DINITRO-o-CRESOLATE, dry or wetted with less than 15 % water, by mass	1.3C								
0235	SODIUM PICRAMATE, dry or wetted with less than 20 % water, by mass	1.3C								
0236	ZIRCONIUM PICRAMATE, dry or wetted with less than 20 % water, by mass	1.3C								
0237	CHARGES, SHAPED, FLEXIBLE, LINEAR	1.4D								
0238	ROCKETS, LINE-THROWING	1.2G								
0240	ROCKETS, LINE-THROWING	1.3G								
0241	EXPLOSIVE, BLASTING, TYPE E	1.1D								

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0242	CHARGES, PROPELLING, FOR CANNON	1.3C								
0243	AMMUNITION, INCENDIARY, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.2H								
0244	AMMUNITION, INCENDIARY, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.3H								
0245	AMMUNITION, SMOKE, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.2H								
0246	AMMUNITION, SMOKE, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.3H								
0247	AMMUNITION, INCENDIARY, liquid or gel, with burster, expelling charge or propelling charge	1.3J								
0248	CONTRIVANCES, WATER-ACTIVATED with burster, expelling charge or propelling charge	1.2L								
0249	CONTRIVANCES, WATER-ACTIVATED with burster, expelling charge or propelling charge	1.3L								
0250	ROCKET MOTORS WITH HYPERGOLIC LIQUIDS with or without expelling charge	1.3L								
0254	AMMUNITION, ILLUMINATING with or without burster, expelling charge or propelling charge	1.3G								
0255	DETONATORS, ELECTRIC for blasting	1.4B								
0257	FUZES, DETONATING	1.4B								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0266	OCTOLITE (OCTOL), dry or wetted with less than 15 % water, by mass	1.1D								
0267	DETONATORS, NON-ELECTRIC for blasting	1.4B								
0268	BOOSTERS WITH DETONATOR	1.2B								
0271	CHARGES, PROPELLING	1.1C								
0272	CHARGES, PROPELLING	1.3C								
0275	CARTRIDGES, POWER DEVICE	1.3C								
0276	CARTRIDGES, POWER DEVICE	1.4C								
0277	CARTRIDGES, OIL WELL	1.3C								
0278	CARTRIDGES, OIL WELL	1.4C								
0279	CHARGES, PROPELLING FOR CANNON	1.1C								
0280	ROCKET MOTORS	1.1C								
0281	ROCKET MOTORS	1.2C								
0282	NITROGUANIDINE (PICRITE), dry or wetted with less than 20 % water, by mass	1.1D								
0283	BOOSTERS without detonator	1.2D								
0284	GRENADES, hand or rifle, with bursting charge	1.1D								
0285	GRENADES, hand or rifle, with bursting charge	1.2D								
0286	WARHEADS, ROCKETS with bursting charge	1.1D								
0287	WARHEADS, ROCKETS with bursting charge	1.2D								
0288	CHARGES, SHAPED, FLEXIBLE, LINEAR	1.1D								
0289	CORD, DETONATING, flexible	1.4D								
0290	CORD (FUSE), DETONATING, metal clad	1.1D								
0291	BOMBS with bursting charge	1.2F								
0292	GRENADES, hand or rifle, with bursting charge	1.1F								

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0293	GRENADES, hand or rifle, with bursting charge	1.2F								
0294	MINES with bursting charge	1.2F								
0295	ROCKETS with bursting charge	1.2F								
0296	SOUNDING DEVICES, EXPLOSIVE	1.1F								
0297	AMMUNITION, ILLUMINATING with or without burster, expelling charge or propelling charge	1.4G								
0299	BOMBS, PHOTO-FLASH	1.3G								
0300	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.4G								
0301	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.4G								
0303	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.4G								
0305	FLASH POWDER	1.3G								
0306	TRACERS FOR AMMUNITION	1.4G			500	2	2		2; 3; 6; 9	1
0312	CARTRIDGES, SIGNAL	1.4G			500	2				
0313	SIGNALS, SMOKE	1.2G								
0314	IGNITERS	1.2G								
0315	IGNITERS	1.3G								
0316	FUZES, IGNITING	1.3G								
0317	FUZES, IGNITING	1.4G								
0318	GRENADES, PRACTICE, hand or rifle	1.3G								
0319	PRIMERS, TUBULAR	1.3G								
0320	PRIMERS, TUBULAR	1.4G								
0321	CARTRIDGES FOR WEAPONS with bursting charge	1.2E								
0322	ROCKET MOTORS WITH HYPERGOLIC LIQUIDS with or without expelling charge	1.2L								
0323	CARTRIDGES, POWER DEVICE	1.4S			Unlimited		2		2; 3; 9	
0324	PROJECTILES with bursting charge	1.2F								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0325	IGNITERS	1.4G								
0326	CARTRIDGES FOR WEAPONS, BLANK	1.1C								
0327	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK	1.3C								
0328	CARTRIDGES FOR WEAPONS, INERT PROJECTILE	1.2C								
0329	TORPEDOES with bursting charge	1.1E								
0330	TORPEDOES with bursting charge	1.1F								
0331	EXPLOSIVE, BLASTING, TYPE B (AGENT, BLASTING, TYPE B)	1.5D								
0332	EXPLOSIVE, BLASTING, TYPE E (AGENT, BLASTING, TYPE E)	1.5D								
0333	FIREWORKS	1.1G								
0334	FIREWORKS	1.2G								
0335	FIREWORKS	1.3G					2		2; 3; 7; 9	
0336	FIREWORKS	1.4G			5 10 100	200 100 10	2		2; 3; 7; 9	
0337	FIREWORKS	1.4S			Unlimited		2		2; 3; 7; 9	
0338	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK	1.4C								
0339	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.4C								
0340	NITROCELLULOSE, dry or wetted with less than 25 % water (or alcohol), by mass	1.1D								
0341	NITROCELLULOSE, unmodified or plasticized with less than 18 % plasticizing substance, by mass	1.1D								

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0342	NITROCELLULOSE, WETTED with not less than 25 % alcohol, by mass	1.3C								
0343	NITROCELLULOSE, PLASTICIZED with not less than 18 % plasticizing substance, by mass	1.3C								
0344	PROJECTILES with bursting charge	1.4D								
0345	PROJECTILES, inert with tracer	1.4S								
0346	PROJECTILES with burster or expelling charge	1.2D								
0347	PROJECTILES with burster or expelling charge	1.4D								
0348	CARTRIDGES FOR WEAPONS with bursting charge	1.4F								
0349	ARTICLES, EXPLOSIVE, N.O.S.	1.4S								
0350	ARTICLES, EXPLOSIVE, N.O.S.	1.4B								
0351	ARTICLES, EXPLOSIVE, N.O.S.	1.4C								
0352	ARTICLES, EXPLOSIVE, N.O.S.	1.4D								
0353	ARTICLES, EXPLOSIVE, N.O.S.	1.4G								
0354	ARTICLES, EXPLOSIVE, N.O.S.	1.1L								
0355	ARTICLES, EXPLOSIVE, N.O.S.	1.2L								
0356	ARTICLES, EXPLOSIVE, N.O.S.	1.3L								
0357	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1L								
0358	SUBSTANCES, EXPLOSIVE, N.O.S.	1.2L								
0359	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3L								
0360	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.1B								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0361	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.4B								
0362	AMMUNITION, PRACTICE	1.4G								
0363	AMMUNITION, PROOF	1.4G								
0364	DETONATORS FOR AMMUNITION	1.2B								
0365	DETONATORS FOR AMMUNITION	1.4B								
0366	DETONATORS FOR AMMUNITION	1.4S								
0367	FUZES, DETONATING	1.4S								
0368	FUZES, IGNITING	1.4S								
0369	WARHEADS, ROCKET with bursting charge	1.1F								
0370	WARHEADS, ROCKET with burster or expelling charge	1.4D								
0371	WARHEADS, ROCKET with burster or expelling charge	1.4F								
0372	GRENADES, PRACTICE, hand or rifle	1.2G								
0373	SIGNAL DEVICES, HAND	1.4S			Unlimited		3		2; 3; 6; 9	
0374	SOUNDING DEVICES, EXPLOSIVE	1.1D								
0375	SOUNDING DEVICES, EXPLOSIVE	1.2D								
0376	PRIMERS, TUBULAR	1.4S			Unlimited					
0377	PRIMERS, CAP TYPE	1.1B								
0378	PRIMERS, CAP TYPE	1.4B								
0379	CASES, CARTRIDGE, EMPTY, WITH PRIMER	1.4C								
0380	ARTICLES, PYROPHORIC	1.2L								
0381	CARTRIDGES, POWER DEVICE	1.2C								
0382	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.2B								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0383	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.4B								
0384	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.4S			Unlimited					
0385	5-NITROBENZOTRIAZOL	1.1D								
0386	TRINITROBENZENE-SULFONIC ACID	1.1D								
0387	TRINITROFLUORENONE	1.1D								
0388	TRINITROTOLUENE (TNT) AND TRINITROBENZENE MIXTURE or TRINITROTOLUENE (TNT) AND HEXANITROSTILBENE MIXTURE	1.1D								
0389	TRINITROTOLUENE (TNT) MIXTURE CONTAINING TRINITROBENZENE AND HEXANITROSTILBENE	1.1D								
0390	TRITONAL	1.1D								
0391	CYCLOTRIMETHYLENE-TRINITRAMINE (CYCLONITE; HEXOGEN; RDX) AND CYCLOTETRAMETHYLENETETRA-NITRAMINE (HMX; OCTOGEN) MIXTURE, WETTED with not less than 15 % water, by mass or CYCLOTRIMETHYLENE-TRINITRAMINE (CYCLO-NITE; HEXOGEN; RDX) AND CYCLOTETRAMETHYLENETETRANITRAMINE (HMX; OCTOGEN) MIXTURE, DESENSITIZED with not less than 10 % phlegmatizer, by mass	1.1D								
0392	HEXANITROSTILBENE	1.1D								
0393	HEXOTONAL	1.1D								
0395	ROCKET MOTORS, LIQUID FUELLED	1.2J								
0396	ROCKET MOTORS, LIQUID FUELLED	1.3J								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0397	ROCKETS, LIQUID FUELLED with bursting charge	1.1J								
0398	ROCKETS, LIQUID FUELLED with bursting charge	1.2J								
0399	BOMBS WITH FLAMMABLE LIQUID with bursting charge	1.1J								
0400	BOMBS WITH FLAMMABLE LIQUID with bursting charge	1.2J								
0401	DIPICRYL SULFIDE, dry or wetted with less than 10 % water, by mass	1.1D								
0402	AMMONIUM PERCHLORATE	1.1D								
0403	FLARES, AERIAL	1.4G					2		2; 3; 6; 9	
0404	FLARES, AERIAL	1.4S			Unlimited		3		2; 3; 6; 9	
0405	CARTRIDGES, SIGNAL	1.4S			Unlimited		3		2; 3; 6; 9	
0406	DINITROSOBENZENE	1.3C								
0407	TETRAZOL-1-ACETIC ACID	1.4C								
0408	FUZES, DETONATING with protective features	1.1D								
0409	FUZES, DETONATING with protective features	1.2D								
0410	FUZES, DETONATING with protective features	1.4D								
0411	PENTAERYTHRITOL TETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN) with not less than 7 % wax, by mass	1.1D								
0412	CARTRIDGES FOR WEAPONS with bursting charge	1.4E								
0413	CARTRIDGES FOR WEAPONS, BLANK	1.2C					50			
0414	CHARGES, PROPELLING, FOR CANNON	1.2C					50			

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0415	CHARGES, PROPELLING	1.2C					50			
0417	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.3C					50			
0418	FLARES, SURFACE	1.1G					50			
0419	FLARES, SURFACE	1.2G					50			
0420	FLARES, AERIAL	1.1G					50			
0421	FLARES, AERIAL	1.2G					50			
0424	PROJECTILES, inert with tracer	1.3G					50			
0425	PROJECTILES, inert with tracer	1.4G					2			
0426	PROJECTILES with burster or expelling charge	1.2F								
0427	PROJECTILES with burster or expelling charge	1.4F								
0428	ARTICLES, PYROTECHNIC for technical purposes	1.1G								
0429	ARTICLES, PYROTECHNIC for technical purposes	1.2G								
0430	ARTICLES, PYROTECHNIC	1.3G			50	20	2		2; 3; 6; 9	1
0431	ARTICLES, PYROTECHNIC	1.4G			100	10	2		2; 3; 6; 9	1
0432	ARTICLES, PYROTECHNIC	1.4S			Unlimited		2		2; 3; 6; 9	1
0433	POWDER CAKE (POWDER PASTE), WETTED with not less than 17 % alcohol, by mass	1.1C								
0434	PROJECTILES with burster or expelling charge	1.2G								
0435	PROJECTILES with burster or expelling charge	1.4G								
0436	ROCKETS with expelling charge	1.2C								
0437	ROCKETS with expelling charge	1.3C								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0438	ROCKETS with expelling charge	1.4C								
0439	CHARGES, SHAPED, without detonator	1.2D								
0440	CHARGES, SHAPED, without detonator	1.4D								
0441	CHARGES, SHAPED, without detonator	1.4S			Unlimited					
0442	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.1D								
0443	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.2D								
0444	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.4D								
0445	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.4S			Unlimited					
0446	CASES, COMBUSTIBLE, EMPTY, without primer	1.4C								
0447	CASES, COMBUSTIBLE, EMPTY, WITHOUT PRIMER	1.3C								
0448	5-MERCAPTOTETRAZOL-1-ACETIC ACID	1.4C								
0449	TORPEDOES, LIQUID FUELLED with or without bursting charge	1.1J								
0450	TORPEDOES, LIQUID FUELLED with inert head	1.3J								
0451	TORPEDOES with bursting charge	1.1D								
0452	GRENADES, PRACTICE, hand or rifle	1.4G								
0453	ROCKETS, LINE-THROWING	1.4G					2		2; 3; 6; 9	
0454	IGNITERS	1.4S			Unlimited		2		2; 3; 9	1
0455	DETONATORS, NON-ELECTRIC for blasting	1.4S			Unlimited					
0456	DETONATORS, ELECTRIC for blasting	1.4S			Unlimited					
0457	CHARGES, BURSTING, PLASTICS BONDED	1.1D								

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0458	CHARGES, BURSTING, PLASTICS BONDED	1.2D								
0459	CHARGES, BURSTING, PLASTICS BONDED	1.4D								
0460	CHARGES, BURSTING, PLASTICS BONDED	1.4S			Unlimited					
0461	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.1B								
0462	ARTICLES, EXPLOSIVE, N.O.S.	1.1C								
0463	ARTICLES, EXPLOSIVE, N.O.S.	1.1D								
0464	ARTICLES, EXPLOSIVE, N.O.S.	1.1E								
0465	ARTICLES, EXPLOSIVE, N.O.S.	1.1F								
0466	ARTICLES, EXPLOSIVE, N.O.S.	1.2C								
0467	ARTICLES, EXPLOSIVE, N.O.S.	1.2D								
0468	ARTICLES, EXPLOSIVE, N.O.S.	1.2E								
0469	ARTICLES, EXPLOSIVE, N.O.S.	1.2F								
0470	ARTICLES, EXPLOSIVE, N.O.S.	1.3C								
0471	ARTICLES, EXPLOSIVE, N.O.S.	1.4E								
0472	ARTICLES, EXPLOSIVE, N.O.S.	1.4F								
0473	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1A								
0474	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1C								
0475	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1D								
0476	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1G								
0477	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3C								
0478	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3G								
0479	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4C								
0480	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4D								

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0481	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4S			Unlimited					
0482	SUBSTANCES, EXPLOSIVE, VERY INSENSITIVE (SUBSTANCES, EVI), N.O.S.	1.5D								
0483	CYCLOTRIMETHYLENE-TRINITRAMINE (CYCLONITE; HEXOGEN; RDX), DESENSITIZED	1.1D								
0484	CYCLOTETRAMETHYLENETETRA-NITRAMINE (HMX; OCTOGEN), DESENSITIZED	1.1D								
0485	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4G								
0486	ARTICLES, EXPLOSIVE, EXTREMELY INSENSITIVE (ARTICLES, EEI)	1.6N								
0487	SIGNALS, SMOKE	1.3G			50	20	2		2; 3; 6; 9	
0488	AMMUNITION, PRACTICE	1.3G								
0489	DINITROGLYCOLURIL (DINGU)	1.1D								
0490	NITROTRIAZOLONE (NTO)	1.1D								
0491	CHARGES, PROPELLING	1.4C								
0492	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.3G								
0493	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.4G					2		2; 3; 8; 9	1
0494	JET PERFORATING GUNS, CHARGED, oil well, without detonator	1.4D	0494							
0495	PROPELLANT, LIQUID	1.3C	0495							
0496	OCTONAL	1.1D	0496							
0497	PROPELLANT, LIQUID	1.1C	0497							
0498	PROPELLANT, SOLID	1.1C	0498							
0499	PROPELLANT, SOLID	1.3C	0499							
0500	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.4S	0500		Unlimited					
0501	PROPELLANT, SOLID	1.4C	0501							

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
0502	ROCKETS with inert head	1.2C	0502							
0503	AIR BAG INFLATORS, or AIR BAG MODULES, or SEAT-BELT PRETENSIONERS	1.4G	0503							
0504	1H-TETRAZOLE	1.1D	0504							
0505	SIGNALS, DISTRESS, ship	1.4G					2		2; 3; 6; 9	1
0506	SIGNALS, DISTRESS, ship	1.4S			Unlimited		3		2; 3; 6; 9	1
0507	SIGNALS, SMOKE	1.4S			Unlimited		3		2; 3; 6; 9	1
0508	1-HYDROXYBENZOTRIAZOLE, ANHYDROUS, dry or wetted with less than 20 % water, by mass	1.3C								
0509	POWDER, SMOKELESS	1.4C								
1001	ACETYLENE, DISSOLVED	2.1			100	10			9; 10; 36	2
1002	AIR, COMPRESSED	2.2			500	2			9; 10	
1003	AIR, REFRIGERATED LIQUID	2.2		5.1	200	5	5		9; 11; 36	20
1005	AMMONIA, ANHYDROUS	2.3		8	20	50			9; 10; 36	7; 17
1006	ARGON, COMPRESSED	2.2			500	2			9; 10; 36	
1008	BORON TRIFLUORIDE	2.3		8	20	50			9; 10; 36	7; 17
1009	BROMOTRIFLUOROMETHANE (REFRIGERANT GAS R 13B1)	2.2			500	2			9; 10; 36	
1010	1,2-BUTADIENE, STABILIZED or 1,3-BUTADIENE STABILIZED or MIXTURES OF 1,3-BUTADIENE AND HYDROCARBONS, STABILIZED, with a vapour pressure at 70 °C ≤ 1,1 MPa (11 bar) and a density at 50 °C ≥ 0,525 kg/L	2.1			100	10			9; 10; 36	2; 20
1011	BUTANE	2.1			100	10			9; 10; 36	2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1012	BUTYLENES MIXTURE or 1-BUTYLENE or CIS-2-BUTYLENE or TRANS-2-BUTYLENE	2.1			100	10			9; 10; 36	2; 20
1013	CARBON DIOXIDE	2.2			500	2			9; 10; 36	
1014	CARBON DIOXIDE AND OXYGEN MIXTURE, COMPRESSED	2.2		5.1	200	5			9; 10; 36	
1015	CARBON DIOXIDE AND NITROUS OXIDE MIXTURE	2.2			500	2			9; 10; 36	
1016	CARBON MONOXIDE, COMPRESSED	2.3		2.1	50	20			9; 10; 36	2; 7; 17
1017	CHLORINE	2.3		8	10	100			9; 10; 36	7; 17
1018	CHLORODIFLUOROMETHANE (REFRIGERANT GAS R 22)	2.2			500	2			9; 10; 36	
1020	CHLOROPENTAFLUOROETHANE (REFRIGERANT GAS R 115)	2.2			500	2			9; 10; 36	
1021	1-CHLORO-1,2,2,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 124)	2.2			500	2			9; 10; 36	
1022	CHLOROTRIFLUOROMETHANE (REFRIGERANT GAS R 13)	2.2			500	2			9; 10; 36	
1023	COAL GAS, COMPRESSED	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1026	CYANOGEN	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1027	CYCLOPROPANE	2.1			100	10			9; 10; 36	2; 20
1028	DICHLORODIFLUOROMETHANE (REFRIGERANT GAS R 12)	2.2			500	2			9; 10; 36	
1029	DICHLOROFLUOROMETHANE (REFRIGERANT GAS R 21)	2.2			500	2			9; 10; 36	
1030	1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)	2.1			100	10			9; 10; 36	2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1032	DIMETHYLAMINE, ANHYDROUS	2.1			100	10			9; 10; 36	2; 20
1033	DIMETHYL ETHER	2.1			100	10			9; 10; 36	2; 20
1035	ETHANE	2.1			100	10			9; 10; 36	2; 20
1036	ETHYLAMINE	2.1			100	10			9; 10; 36	2; 20
1037	ETHYL CHLORIDE	2.1			100	10			9; 10; 36	2; 20
1038	ETHYLENE, REFRIGERATED LIQUID	2.1			100	10	5		9; 11; 36	2,17
1039	ETHYL METHYL ETHER	2.1			100	10			9; 10; 36	2; 20
1040	ETHYLENE OXIDE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1040	ETHYLENE OXIDE WITH NITROGEN up to a total pressure of 1 MPa (10 bar) at 50 °C	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1041	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with > 9 % but ≤ 87 % ethylene oxide	2.1			100	10			9; 10; 36	2; 20
1043	FERTILIZER AMMONIATING SOLUTION with free ammonia	2.2			500	2				
1044	FIRE EXTINGUISHERS with compressed or liquefied gas	2.2			500	2			9	
1045	FLUORINE, COMPRESSED	2.3		5.1 8	10	100			9; 10; 36	7; 17
1046	HELIUM, COMPRESSED	2.2			500	2			9; 10; 36	
1048	HYDROGEN BROMIDE, ANHYDROUS	2.3		8	10	100			9; 10; 36	7; 17
1049	HYDROGEN, COMPRESSED	2.1			100	10			9; 10; 36	2
1050	HYDROGEN CHLORIDE, ANHYDROUS	2.3		8	10	100			9; 10; 36	7; 17
1051	HYDROGEN CYANIDE, STABILIZED containing < 3 % water	6.1	I	3	5	200			1; 13; 28	2; 9; 10; 17
1052	HYDROGEN FLUORIDE, ANHYDROUS	8	I	6.1	5	200			13; 28; 34	17
1053	HYDROGEN SULFIDE	2.3		2.1	10	100			9; 10; 36	2; 7; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1055	ISOBUTYLENE	2.1			100	10			9; 10; 36	2; 20
1056	KRYPTON, COMPRESSED	2.2			500	2			9; 10; 36	
1057	LIGHTERS or LIGHTER REFILLS containing flammable gas	2.1			100	10			9	2
1058	LIQUEFIED GASES, non-flammable, charged with nitrogen, carbon dioxide or air	2.2			500	2			9; 10; 36	
1060	METHYLACETYLENE AND PROPADIENE MIXTURE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1061	METHYLAMINE, ANHYDROUS	2.1			100	10			9; 10; 36	2; 20
1062	METHYL BROMIDE with ≤ 2 % chloropicrin	2.3			10	100			9; 10; 36	7; 17
1063	METHYL CHLORIDE (REFRIGERANT GAS R 40)	2.1			100	10			9; 10; 36	2; 20
1064	METHYL MERCAPTAN	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1065	NEON, COMPRESSED	2.2			500	2			9; 10; 36	
1066	NITROGEN, COMPRESSED	2.2			500	2			9; 10; 36	
1067	DINITROGEN TETROXIDE (NITROGEN DIOXIDE)	2.3		5.1 8	10	100			9; 10; 36	7; 17
1069	NITROSYL CHLORIDE	2.3		8	10	100			9; 10; 36	7; 17
1070	NITROUS OXIDE	2.2		5.1	200	5			9; 10; 36	
1071	OIL GAS, COMPRESSED	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1072	OXYGEN, COMPRESSED	2.2		5.1	200	5			9; 10; 36	
1073	OXYGEN, REFRIGERATED LIQUID	2.2		5.1	200	5	5		9; 11; 36	20
1075	PETROLEUM GASES, LIQUEFIED	2.1			100	10			9; 10; 36	2; 20

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1076	PHOSGENE	2.3		8	10	100			9; 10; 36	7; 17
1077	PROPYLENE	2.1			100	10			9; 10; 36	2; 20
1078	REFRIGERANT GAS, N.O.S	2.2			500	2			9; 10; 36	
1079	SULFUR DIOXIDE	2.3		8	50	20			9; 10; 36	7; 17
1080	SULFUR HEXAFLUORIDE	2.2			500	2			9; 10; 36	
1081	TETRAFLUORO- ETHYLENE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1082	TRIFLUOROCHLORO- ETHYLENE, STABILIZED	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1083	TRIMETHYLAMINE, ANHYDROUS	2.1			100	10			9; 10; 36	2; 20
1085	VINYL BROMIDE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1086	VINYL CHLORIDE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1087	VINYL METHYL ETHER, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1088	ACETAL	3	II		500	2				2; 20
1089	ACETALDEHYDE	3	I		100	10				2; 20
1090	ACETONE	3	II		500	2				2; 20
1091	ACETONE OILS	3	II		500	2				2; 20
1092	ACROLEIN, STABILIZED	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1093	ACRYLONITRILE, STABILIZED	3	I	6.1	50	20			13; 28	2; 19
1098	ALLYL ALCOHOL	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1099	ALLYL BROMIDE	3	I	6.1	50	20			13; 28	2; 19
1100	ALLYL CHLORIDE	3	I	6.1	50	20			13; 28	2; 19
1104	AMYL ACETATES	3	III		1 000	1				2
1105	PENTANOLS	3	II		500	2				2; 20
		3	III		1 000	1				2
1106	AMYLAMINE	3	II	8	200	5				2; 20
		3	III	8	500	2				2
1107	AMYL CHLORIDE	3	II		500	2				2; 20
1108	1-PENTENE (n-AMYLENE)	3	I		100	10				2; 20
1109	AMYL FORMATES	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1110	n-AMYL METHYL KETONE	3	III		1 000	1				2
1111	AMYL MERCAPTAN	3	II		500	2				2; 20
1112	AMYL NITRATE	3	III		1 000	1				2
1113	AMYL NITRITE	3	II		500	2				2; 20
1114	BENZENE	3	II		500	2				2; 20
1120	BUTANOLS	3	II		500	2				2; 20
		3	III		1 000	1				2
1123	BUTYL ACETATES	3	II		500	2				2; 20
		3	III		1 000	1				2
1125	n-BUTYLAMINE	3	II	8	200	5				2; 20
1126	1-BROMOBUTANE	3	II		500	2				2; 20
1127	CHLOROBUTANES	3	II		500	2				2; 20
1128	n-BUTYL FORMATE	3	II		500	2				2; 20
1129	BUTYRALDEHYDE	3	II		500	2				2; 20
1130	CAMPHOR OIL	3	III		1 000	1				2
1131	CARBON DISULFIDE	3	I	6.1	50	20			13; 28	2; 19
1133	ADHESIVES containing flammable liquid	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1134	CHLOROBENZENE	3	III		1 000	1				2
1135	ETHYLENE CHLOROHYDRIN	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1136	COAL TAR DISTILLATES, FLAMMABLE	3	II		500	2				2; 20
		3	III		1 000	1				2
1139	COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under coating, drum or barrel lining)	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1143	CROTONALDEHYDE, STABILIZED	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1144	CROTONYLENE	3	I		100	10				2; 20
1145	CYCLOHEXANE	3	II		500	2				2; 20
1146	CYCLOPENTANE	3	II		500	2				2; 20
1147	DECAHYDRO-NAPHTHALENE	3	III		1 000	1				2
1148	DIACETONE ALCOHOL	3	II		500	2				2; 20
		3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1149	DIBUTYL ETHERS	3	III		1 000	1				2
1150	1,2-DICHLORO-ETHYLENE	3	II		500	2				2; 20
1152	DICHLOROPENTANES	3	III		1 000	1				2
1153	ETHYLENE GLYCOL DIETHYL ETHER	3	II		500	2				2; 20
		3	III		1 000	1				2
1154	DIETHYLAMINE	3	II	8	200	5				2; 20
1155	DIETHYL ETHER (ETHYL ETHER)	3	I		100	10				2; 20
1156	DIETHYL KETONE	3	II		500	2				2; 20
1157	DIISOBUTYL KETONE	3	III		1 000	1				2
1158	DIISOPROPYLAMINE	3	II	8	200	5				2; 20
1159	DIISOPROPYL ETHER	3	II		500	2				2; 20
1160	DIMETHYLAMINE AQUEOUS SOLUTION	3	II	8	200	5				2; 20
1161	DIMETHYL CARBONATE	3	II		500	2				2; 20
1162	DIMETHYLDICHLORO-SILANE	3	II	8	200	5				2; 20
1163	DIMETHYLHYDRAZINE, UNSYMMETRICAL	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1164	DIMETHYL SULFIDE	3	II		500	2				2; 20
1165	DIOXANE	3	II		500	2				2; 20
1166	DIOXOLANE	3	II		500	2				2; 20
1167	DIVINYL ETHER, STABILIZED	3	I		100	10				2; 20
1169	EXTRACTS, AROMATIC, LIQUID	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1170	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	3	II		500	2				2; 20
		3	III		1 000	1				2
1171	ETHYLENE GLYCOL MONOETHYL ETHER	3	III		1 000	1				2
1172	ETHYLENE GLYCOL MONOETHYL ETHER ACETATE	3	III		1 000	1				2
1173	ETHYL ACETATE	3	II		500	2				2; 20
1175	ETHYLBENZENE	3	II		500	2				2; 20
1176	ETHYL BORATE	3	II		500	2				2; 20
1177	2-ETHYLBUTYL ACETATE	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1178	2-ETHYL-BUTYRALDEHYDE	3	II		500	2				2; 20
1179	ETHYL BUTYL ETHER	3	II		500	2				2; 20
1180	ETHYL BUTYRATE	3	III		1 000	1				2
1181	ETHYL CHLORO-ACETATE	6.1	II	3	5	200			13; 28	2; 9; 19
1182	ETHYL CHLORO-FORMATE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1183	ETHYLDICHLORO-SILANE	4.3	I	3 8	0		1		23	2; 20
1184	ETHYLENE DICHLORIDE	3	II	6.1	200	5			13; 28	2; 19
1185	ETHYLENEIMINE, STABILIZED	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1188	ETHYLENE GLYCOL MONOMETHYL ETHER	3	III		1 000	1				2
1189	ETHYLENE GLYCOL MONOMETHYL ETHER ACETATE	3	III		1 000	1				2
1190	ETHYL FORMATE	3	II		500	2				2; 20
1191	OCTYL ALDEHYDES	3	III		1 000	1				2
1192	ETHYL LACTATE	3	III		1 000	1				2
1193	ETHYL METHYL KETONE	3	II		500	2				2; 20
1194	ETHYL NITRITE SOLUTION	3	I	6.1	50	20			13; 28	2; 19
1195	ETHYL PROPIONATE	3	II		500	2				2; 20
1196	ETHYLTRICHLORO-SILANE	3	II	8	200	5				2; 20
1197	EXTRACTS, FLAVOURING, LIQUID	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1198	FORMALDEHYDE SOLUTION, FLAMMABLE	3	III	8	500	2				2
1199	FURALDEHYDES	6.1	II	3	5	200			13; 28	2; 9; 19
1201	FUSEL OIL	3	II		500	2				2; 20
		3	III		1 000	1				2
1202	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT, flash point ≤ 60,5 °C c.c.	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1202	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT, flash point > 60,5 °C c.c.	3	III		1 000	1				
1202	DIESEL FUEL complying with EN 590 or GAS OIL or HEATING OIL, LIGHT with a flash point as specified in EN 590	3	III		1 000	1				2
1203	MOTOR SPIRIT or GASOLINE or PETROL	3	II		500	2				2; 20
1204	NITROGLYCERIN SOLUTION IN ALCOHOL with ≤ 1 % nitroglycerin	3	II		500	2				2; 20
1206	HEPTANES	3	II		500	2				2; 20
1207	HEXALDEHYDE	3	III		1 000	1				2
1208	HEXANES	3	II		500	2				2; 20
1210	PRINTING INK, flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound)	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1212	ISOBUTANOL (ISOBUTYL ALCOHOL)	3	III		1 000	1				2
1213	ISOBUTYL ACETATE	3	II		500	2				2; 20
1214	ISOBUTYLAMINE	3	II	8	200	5				2; 20
1216	ISOOCTENES	3	II		500	2				2; 20
1218	ISOPRENE, STABILIZED	3	I		100	10				2; 20
1219	ISOPROPYL ALCOHOL (ISOPROPANOL)	3	II		500	2				2; 20
1220	ISOPROPYL ACETATE	3	II		500	2				2; 20
1221	ISOPROPYLAMINE	3	I	8	50	20				2; 20
1222	ISOPROPYL NITRATE	3	II		500	2				2; 20
1223	KEROSENE	3	III		1 000	1				2
1224	KETONES, LIQUID, N.O.S.	3	II		500	2				2; 20
		3	III		1 000	1				2
1228	MERCAPTANS, LIQUID, FLAMMABLE, TOXIC, N.O.S. or MERCAPTAN, MIXTURE LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
1229	MESITYL OXIDE	3	III		1 000	1				2
1230	METHANOL	3	II	6.1	200	5			13; 28	2; 19
1231	METHYL ACETATE	3	II		500	2				2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1233	METHYLAMYL ACETATE	3	III		1 000	1				2
1234	METHYLAL	3	II		500	2				2; 20
1235	METHYLAMINE, AQUEOUS SOLUTION	3	II	8	200	5				2; 20
1237	METHYL BUTYRATE	3	II		500	2				2; 20
1238	METHYL CHLORO-FORMATE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1239	METHYL CHLORO-METHYL ETHER	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1242	METHYLDICHLORO-SILANE	4.3	I	3 8	0		1		23	2; 20
1243	METHYL FORMATE	3	I		100	10				2; 20
1244	METHYLHYDRAZINE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1245	METHYL ISOBUTYL KETONE	3	II		500	2				2; 20
1246	METHYL ISOPROPENYL KETONE, STABILIZED	3	II		500	2				2; 20
1247	METHYL METHA-CRYLATE MONOMER, STABILIZED	3	II		500	2				2; 20
1248	METHYL PROPIONATE	3	II		500	2				2; 20
1249	METHYL PROPYL KETONE	3	II		500	2				2; 20
1250	METHYLTRICHLORO-SILANE	3	I	8	50	20				2; 20
1251	METHYL VINYL KETONE, STABILIZED	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1259	NICKEL CARBONYL	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1261	NITROMETHANE	3	II		500	2				2; 20
1262	OCTANES	3	II		500	2				2; 20
1263	PAINT or PAINT RELATED MATERIAL	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1264	PARALDEHYDE	3	III		1 000	1				2
1265	PENTANES, liquid	3	I		100	10				2; 20
		3	II		500	2				2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1266	PERFUMERY PRODUCTS with flammable solvents	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1267	PETROLEUM CRUDE OIL	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1272	PINE OIL	3	III		1 000	1				2
1274	n-PROPANOL (PROPYL ALCOHOL, NORMAL)	3	II		500	2				2; 20
		3	III		1 000	1				2
1275	PROPIONALDEHYDE	3	II		500	2				2; 20
1276	n-PROPYL ACETATE	3	II		500	2				2; 20
1277	PROPYLAMINE	3	II	8	200	5				2; 20
1278	1-CHLOROPROPANE	3	II		500	2				2; 20
1279	1,2-DICHLOROPROPANE	3	II		500	2				2; 20
1280	PROPYLENE OXIDE	3	I		100	10				2; 20
1281	PROPYL FORMATES	3	II		500	2				2; 20
1282	PYRIDINE	3	II		500	2				2; 20
1286	ROSIN OIL	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1287	RUBBER SOLUTION	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1288	SHALE OIL	3	II		500	2				2; 20
		3	III		1 000	1				2
1289	SODIUM METHYLATE SOLUTION in alcohol	3	II	8	200	5				2; 20
		3	III	8	500	2				2
1292	TETRAETHYL SILICATE	3	III		1 000	1				2
1293	TINCTURES, MEDICINAL	3	II		500	2				2; 20
		3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1294	TOLUENE	3	II		500	2				2; 20
1295	TRICHLOROSILANE	4.3	I	3 8	0		1		23	2; 20
1296	TRIETHYLAMINE	3	II	8	200	5				2; 20
1297	TRIMETHYLAMINE, AQUEOUS SOLUTION, ≤ 50 % trimethylamine, by mass	3	I	8	50	20				2; 20
		3	II	8	200	5				2; 20
		3	III	8	500	2				2
1298	TRIMETHYLCHLOROSILANE	3	II	8	200	5				2; 20
1299	TURPENTINE	3	III		1 000	1				2
1300	TURPENTINE SUBSTITUTE	3	II		500	2				2; 20
		3	III		1 000	1				2
1301	VINYL ACETATE, STABILIZED	3	II		500	2				2; 20
1302	VINYL ETHYL ETHER, STABILIZED	3	I		100	10				2; 20
1303	VINYLDENE CHLORIDE, STABILIZED	3	I		100	10				2; 20
1304	VINYL ISOBUTYL ETHER, STABILIZED	3	II		500	2				2; 20
1305	VINYLTRICHLOROSILANE	3	I	8	50	20				2; 20
1306	WOOD PRESERVATIVES, LIQUID	3	II		500	2				2; 20
		3	III		1 000	1				2
1307	XYLENES	3	II		500	2				2; 20
		3	III		1 000	1				2
1308	ZIRCONIUM SUSPENDED IN A FLAMMABLE LIQUID	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1309	ALUMINIUM POWDER, COATED	4.1	II		50	20	11	-		
		4.1	III		500	2	-	1		
1310	AMMONIUM PICRATE, WETTED with ≥ 10 % water, by mass	4.1	I		0					17
1312	BORNEOL	4.1	III		500	2		1		
1313	CALCIUM RESINATE	4.1	III		500	2	12	1		
1314	CALCIUM RESINATE, FUSED	4.1	III		500	2		1		

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1318	COBALT RESINATE, PRECIPITATED	4.1	III		500	2	12	1		
1320	DINITROPHENOL, WETTED with ≥ 15 % water, by mass	4.1	I	6.1	0				28	17
1321	DINITROPHENOLATES, WETTED with ≥ 15 % water, by mass	4.1	I	6.1	0				28	17
1322	DINITRORESORCINOL, WETTED with ≥ 15 % water, by mass	4.1	I		0					17
1323	FERROCERIUM	4.1	II		50	20	11			
1324	FILMS, NITROCELLULOSE BASE, gelatin coated, except scrap	4.1	III		500	2				
1325	FLAMMABLE SOLID, ORGANIC, N.O.S.	4.1	II		50	20	11	-		
		4.1	III		500	2	-	1		
1326	HAFNIUM POWDER, WETTED with ≥ 25 % water	4.1	II		50	20	11; 12			
1327	Hay, Straw, or Bhusa	4.1	Non-dangerous for road transport							
1328	HEXAMETHYLENE-TETRAMINE	4.1	III		500	2		1		
1330	MANGANESE RESINATE	4.1	III		500	2	12	1		
1331	MATCHES, 'STRIKE ANYWHERE'	4.1	III		500	2				
1332	METALDEHYDE	4.1	III		500	2		1		
1333	CERIUM, slabs, ingots or rods	4.1	II		50	20	11			
1334	NAPHTHALENE, CRUDE or NAPHTHALENE, REFINED	4.1	III		500	2		2		
1336	NITROGUANIDINE (PICRITE), WETTED with ≥ 20 % water, by mass	4.1	I		0					17
1337	NITROSTARCH, WETTED with ≥ 20 % water, by mass	4.1	I		0					17
1338	PHOSPHORUS, AMORPHOUS	4.1	III		500	2		1		

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1339	PHOSPHORUS HEPTA-SULFIDE, free from yellow and white phosphorus	4.1	II		50	20				
1340	PHOSPHORUS PENTA-SULFIDE, free from yellow and white phosphorus	4.3	II	4.1	20	50	1		23	
1341	PHOSPHORUS SESQUI-SULFIDE, free from yellow and white phosphorus	4.1	II		50	20				
1343	PHOSPHORUS TRI-SULFIDE, free from yellow and white phosphorus	4.1	II		50	20				
1344	TRINITROPHENOL, WETTED with ≥ 30 % water, by mass	4.1	I		0					17
1345	RUBBER SCRAP or RUBBER SHODDY, powdered or granulated	4.1	II		50	20	11			
1346	SILICON POWDER, AMORPHOUS	4.1	III		500	2		1		
1347	SILVER PICRATE, WETTED with ≥ 30 % water, by mass	4.1	I		0					17
1348	SODIUM DINITRO-ortho-CRESOLATE, WETTED with ≥ 15 % water, by mass	4.1	I	6.1	0				28	17
1349	SODIUM PICRAMATE, WETTED with ≥ 20 % water, by mass	4.1	I		0					17
1350	SULFUR	4.1	III		500	2		1		
1352	TITANIUM POWDER, WETTED with ≥ 25 % water	4.1	II		50	20	11; 12			
1353	FABRICS or FABRICS IMPREGNATED WITH WEAKLY NITRATED NITROCELLULOSE, N.O.S.	4.1	III		500	2				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1354	TRINITROBENZENE, WETTED with ≥ 30 % water, by mass	4.1	I		0					17
1355	TRINITROBENZOIC ACID, WETTED with ≥ 30 % water, by mass	4.1	I		0					17
1356	TRINITROTOLUENE (TNT), WETTED with ≥ 30 % water, by mass	4.1	I		0					17
1357	UREA NITRATE, WETTED with ≥ 20 % water, by mass	4.1	I		0					17
1358	ZIRCONIUM POWDER, WETTED with ≥ 25 % water	4.1	II		50	20	11; 12			
1360	CALCIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
1361	CARBON, animal or vegetable origin	4.2	II		100	10	1; 12; 13	-		
		4.2	III		200	5	1; 13	4		
1362	CARBON, ACTIVATED	4.2	III		200	5	1	4		
1363	COPRA	4.2	III		200	5	1	4		
1364	COTTON WASTE, OILY	4.2	III		200	5	1	4		
1365	COTTON, WET	4.2	III		200	5	1	4		
1366	DIETHYLZINC	4.2	I	4.3	0		1			20
1369	p-NITROSODIMETHYL-ANILINE	4.2	II		100	10	1; 12			
1370	DIMETHYLZINC	4.2	I	4.3	0		1			20
1372	Fibres, animal or fibres, vegetable burnt, wet or damp	4.2	Non-dangerous for road transport							
1373	FIBRES or FABRICS, ANIMAL or VEGETABLE or SYNTHETIC, N.O.S., with oil	4.2	III		200	5	1	4		
1374	FISH MEAL (FISH SCRAP), UNSTABILIZED	4.2	II		100	10	1			
1376	IRON OXIDE, SPENT or IRON SPONGE, SPENT obtained from coal gas purification	4.2	III		200	5	1	4		
1378	METAL CATALYST, WETTED with a visible excess of liquid	4.2	II		100	10	1			
1379	PAPER, UNSATURATED OIL TREATED, incompletely dried (including carbon paper)	4.2	III		200	5	1	4		
1380	PENTABORANE	4.2	I	6.1	0		1		28	20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1381	PHOSPHORUS WHITE or YELLOW, UNDER WATER or IN SOLUTION	4.2	I	6.1	0		1		28	20
	PHOSPHORUS WHITE or YELLOW, DRY	4.2	I	6.1	0		1		28	20
1382	POTASSIUM SULFIDE, ANHYDROUS or POTASSIUM SULFIDE with < 30 % water of crystallization	4.2	II		100	10	1; 12			
1383	PYROPHORIC METAL, N.O.S or PYROPHORIC ALLOY, N.O.S.	4.2	I		0		1			20
1384	SODIUM DITHIONITE (SODIUM HYDRO-SULFITE)	4.2	II		100	10	1; 12			
1385	SODIUM SULFIDE, ANHYDROUS or SODIUM SULFIDE with < 30 % water of crystallization	4.2	II		100	10	1; 12			
1386	SEED CAKE with > 1,5 % oil and ≤ 11 % moisture	4.2	III		200	5	1	4		
1387	Wool waste, wet	4.2	Non-dangerous for road transport							
1389	ALKALI METAL AMALGAM, LIQUID	4.3	I		0		1		23	20
1390	ALKALI METAL AMIDES	4.3	II		100	10	1; 12		23	
1391	ALKALINE METAL DISPERSION or ALKALINE EARTH METAL DISPERSION	4.3	I		0		1		23	20
1392	ALKALINE EARTH METAL AMALGAM, LIQUID	4.3	I		0		1		23	20
1393	ALKALINE EARTH METAL ALLOY, N.O.S.	4.3	II		100	10	1; 12		23	
1394	ALUMINIUM CARBIDE	4.3	II		100	10	1; 12	5	23	
1395	ALUMINIUM FERRO-SILICON POWDER	4.3	II	6.1	20	50	1		23; 28	
1396	ALUMINIUM POWDER, UNCOATED	4.3	II		100	10	1; 12	-	23	
		4.3	III		500	2	1	5	23	
1397	ALUMINIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
1398	ALUMINIUM SILICON POWDER, UNCOATED	4.3	III		500	2	1	5	23	
1400	BARIUM	4.3	II		100	10	1; 12		23	

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1401	CALCIUM	4.3	II		100	10	1; 12		23	
1402	CALCIUM CARBIDE	4.3	I		0	-	1	-	23	20
		4.3	II		100	10	1; 12	5	23	-
1403	CALCIUM CYANAMIDE with > 0,1 % calcium carbide	4.3	III		500	2	1		23	
1404	CALCIUM HYDRIDE	4.3	I		0		1		23	20
1405	CALCIUM SILICIDE	4.3	II		100	10	1; 12	7	23	
		4.3	III		500	2	1	5; 7	23	
1407	CAESIUM	4.3	I		0		1		23	20
1408	FERROSILICON with ≥ 30 % but < 90 % silicon	4.3	III	6.1	100	10	1	1	23; 28	
1409	METAL HYDRIDES, WATER-REACTIVE, N.O.S.	4.3	I		0	-	1		23	20
		4.3	II		100	10	1		23	-
1410	LITHIUM ALUMINIUM HYDRIDE	4.3	I		0		1		23	20
1411	LITHIUM ALUMINIUM HYDRIDE, ETHEREAL	4.3	I	3	0		1		23	2; 20
1413	LITHIUM BOROHYDRIDE	4.3	I		0		1		23	20
1414	LITHIUM HYDRIDE	4.3	I		0		1		23	20
1415	LITHIUM	4.3	I		0		1		23	20
1417	LITHIUM SILICON	4.3	II		100	10	1; 12		23	
1418	MAGNESIUM POWDER or MAGNESIUM ALLOYS POWDER	4.3	I	4.2	0	-	1	-	23	20
		4.3	II	4.2	20	50	1	-	23	-
		4.3	III	4.2	100	10	1	5	23	-
1419	MAGNESIUM ALUMINIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
1420	POTASSIUM METAL ALLOYS, LIQUID	4.3	I		0		1		23	20
1421	ALKALI METAL ALLOY, LIQUID, N.O.S	4.3	I		0		1		23	20
1422	POTASSIUM SODIUM ALLOYS, LIQUID	4.3	I		0		1		23	20
1423	RUBIDIUM	4.3	I		0		1		23	20
1426	SODIUM BOROHYDRIDE	4.3	I		0		1		23	20
1427	SODIUM HYDRIDE	4.3	I		0		1		23	20
1428	SODIUM	4.3	I		0		1		23	20
1431	SODIUM METHYLATE	4.2	II	8	20	50	1			
1432	SODIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
1433	STANNIC PHOSPHIDES	4.3	I	6.1	0		1		23; 28	20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1435	ZINC ASHES	4.3	III		500	2	1	5	23	
1436	ZINC POWDER or ZINC DUST	4.3	I	4.2	0	–	1	–	23	20
		4.3	II	4.2	20	50	1; 12	–	23	–
		4.3	III	4.2	100	10	1	5	23	–
1437	ZIRCONIUM HYDRIDE	4.1	II		50	20				
1438	ALUMINIUM NITRATE	5.1	III		200	5		8	24	
1439	AMMONIUM DICHROMATE	5.1	II		50	20	11		24	
1442	AMMONIUM PERCHLORATE	5.1	II		50	20	6; 11; 12	8	24	
1444	AMMONIUM PERSULFATE	5.1	III		200	5		8	24	
1445	BARIUM CHLORATE, SOLID	5.1	II	6.1	20	50	11; 12		24; 28	
1446	BARIUM NITRATE	5.1	II	6.1	20	50	11		24; 28	
1447	BARIUM PERCHLORATE, SOLID	5.1	II	6.1	20	50	11; 12		24; 28	
1448	BARIUM PERMANGANATE	5.1	II	6.1	20	50	11; 12		24; 28	
1449	BARIUM PEROXIDE	5.1	II	6.1	20	50	11; 12		24; 28	
1450	BROMATES, INORGANIC, N.O.S.	5.1	II		50	20	11	8	24	
1451	CAESIUM NITRATE	5.1	III		200	5		8	24	
1452	CALCIUM CHLORATE	5.1	II		50	20	11	8	24	
1453	CALCIUM CHLORITE	5.1	II		50	20	11		24	
1454	CALCIUM NITRATE	5.1	III		200	5		8	24	
1455	CALCIUM PERCHLORATE	5.1	II		50	20	11; 12	8	24	
1456	CALCIUM PERMANGANATE	5.1	II		50	20	11; 12		24	
1457	CALCIUM PEROXIDE	5.1	II		50	20	11; 12		24	
1458	CHLORATE AND BORATE MIXTURE	5.1	II		50	20	11	8	24	
		5.1	III		200	5	–	8	24	
1459	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE, SOLID	5.1	II		50	20	11	8	24	
		5.1	III		200	5	–	8	24	
1461	CHLORATES, INORGANIC, N.O.S.	5.1	II		50	20	11; 12	8	24	
1462	CHLORITES, INORGANIC, N.O.S.	5.1	II		50	20	11; 12		24	

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1463	CHROMIUM TRIOXIDE, ANHYDROUS	5.1	II	8	20	50			24	
1465	DIDYMIUM NITRATE	5.1	III		200	5		8	24	
1466	FERRIC NITRATE	5.1	III		200	5		8	24	
1467	GUANIDINE NITRATE	5.1	III		200	5		8	24	
1469	LEAD NITRATE	5.1	II	6.1	20	50	11		24; 28	
1470	LEAD PERCHLORATE, SOLID	5.1	II	6.1	20	50	11; 12		24; 28	
1471	LITHIUM HYPOCHLORITE, DRY or LITHIUM HYPOCHLORITE MIXTURE	5.1	II		50	20	11		24	
1472	LITHIUM PEROXIDE	5.1	II		50	20	11; 12		24	
1473	MAGNESIUM BROMATE	5.1	II		50	20		8	24	
1474	MAGNESIUM NITRATE	5.1	III		200	5		8	24	
1475	MAGNESIUM PERCHLORATE	5.1	II		50	20	11; 12	8	24	
1476	MAGNESIUM PEROXIDE	5.1	II		50	20	11; 12		24	
1477	NITRATES, INORGANIC, N.O.S.	5.1	II		50	20	11	–	24	
		5.1	III		200	5	–	8	24	
1479	OXIDIZING SOLID, N.O.S.	5.1	I		20	50	10		24	20
		5.1	II		50	20	11		24	–
		5.1	III		200	5	–		24	–
1481	PERCHLORATES, INORGANIC, N.O.S.	5.1	II		50	20	11; 12	8	24	
		5.1	III		200	5	–	8	24	
1482	PERMANGANATES, INORGANIC, N.O.S.	5.1	II		50	20	11; 12		24	
		5.1	III		200	5	–		24	
1483	PEROXIDES, INORGANIC, N.O.S.	5.1	II		50	20	11; 12		24	
		5.1	III		200	5	–		24	
1484	POTASSIUM BROMATE	5.1	II		50	20		8	24	
1485	POTASSIUM CHLORATE	5.1	II		50	20		8	24	
1486	POTASSIUM NITRATE	5.1	III		200	5		8	24	
1487	POTASSIUM NITRATE AND SODIUM NITRITE MIXTURE	5.1	II		50	20		8	24	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1488	POTASSIUM NITRITE	5.1	II		50	20		8	24	
1489	POTASSIUM PERCHLORATE	5.1	II		50	20	11; 12	8	24	
1490	POTASSIUM PERMANGANATE	5.1	II		50	20			24	
1491	POTASSIUM PEROXIDE	5.1	I		20	50	10; 12		24	20
1492	POTASSIUM PERSULFATE	5.1	III		200	5		8	24	
1493	SILVER NITRATE	5.1	II		50	20		8	24	
1494	SODIUM BROMATE	5.1	II		50	20		8	24	
1495	SODIUM CHLORATE	5.1	II		50	20		8	24	
1496	SODIUM CHLORITE	5.1	II		50	20	11		24	
1498	SODIUM NITRATE	5.1	III		200	5		8	24	
1499	SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	5.1	III		200	5		8	24	
1500	SODIUM NITRITE	5.1	III	6.1	100	10			24; 28	
1502	SODIUM PERCHLORATE	5.1	II		50	20	11; 12	8	24	
1503	SODIUM PERMANGANATE	5.1	II		50	20	11; 12		24	
1504	SODIUM PEROXIDE	5.1	I		20	50	10		24	20
1505	SODIUM PERSULFATE	5.1	III		200	5		8	24	
1506	STRONTIUM CHLORATE	5.1	II		50	20	11	8	24	
1507	STRONTIUM NITRATE	5.1	III		200	5		8	24	
1508	STRONTIUM PERCHLORATE	5.1	II		50	20	11; 12	8	24	
1509	STRONTIUM PEROXIDE	5.1	II		50	20	11; 12		24	
1510	TETRANITROMETHANE	5.1	I	6.1	0		5		24; 28	20
1511	UREA HYDROGEN PEROXIDE	5.1	III	8	100	10			24	
1512	ZINC AMMONIUM NITRITE	5.1	II		50	20			24	
1513	ZINC CHLORATE	5.1	II		50	20	11	8	24	
1514	ZINC NITRATE	5.1	II		50	20			24	
1515	ZINC PERMANGANATE	5.1	II		50	20	11; 12		24	
1516	ZINC PEROXIDE	5.1	II		50	20	11; 12		24	
1517	ZIRCONIUM PICRAMATE, WETTED with ≥ 20 % water, by mass	4.1	I		0					17

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Table C.1 (concluded)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1541	ACETONE CYANO-HYDRIN, STABILIZED	6.1	I		5	200			1; 13; 28	9; 17
1544	ALKALOIDS, SOLID, N.O.S. or ALKALOID SALTS, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1545	ALLYL ISOTHIO-CYANATE, STABILIZED	6.1	II	3	5	200			13; 28	2; 9; 19
1546	AMMONIUM ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1547	ANILINE	6.1	II		50	20			13; 28	9; 19
1548	ANILINE HYDRO-CHLORIDE	6.1	III		100	10		9b	13; 28	9
1549	ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S.	6.1	III		100	10		9b	13; 28	9
1550	ANTIMONY LACTATE	6.1	III		100	10		9b	13; 28	9
1551	ANTIMONY POTASSIUM TARTRATE	6.1	III		100	10		9b	13; 28	9
1553	ARSENIC ACID, LIQUID	6.1	I		5	200			1; 13; 28	9; 17
1554	ARSENIC ACID, SOLID	6.1	II		50	20	11		13; 28	9; 19
1555	ARSENIC BROMIDE	6.1	II		50	20	11		13; 28	9; 19
1556	ARSENIC COMPOUND, LIQUID, N.O.S., inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s. and Arsenic sulfides, n.o.s	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1557	ARSENIC COMPOUND, SOLID, N.O.S., inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s. and Arsenic sulfides, n.o.s.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1558	ARSENIC	6.1	II		50	20	11		13; 28	9; 19
1559	ARSENIC PENTOXIDE	6.1	II		50	20	11		13; 28	9; 19
1560	ARSENIC TRICHLORIDE	6.1	I		5	200			1; 13; 28	9; 17
1561	ARSENIC TRIOXIDE	6.1	II		50	20	11		13; 28	9; 19
1562	ARSENICAL DUST	6.1	II		50	20	11		13; 28	9; 19
1564	BARIUM COMPOUND, N.O.S.	6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9a	13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1565	BARIUM CYANIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1566	BERYLLIUM COMPOUND, N.O.S.	6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1567	BERYLLIUM POWDER	6.1	II	4.1	5	200	11		13; 28	9; 19
1569	BROMOACETONE	6.1	II	3	5	200			13; 28	2; 9; 19
1570	BRUCINE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1571	BARIUM AZIDE, WETTED with ≥ 50 % water, by mass	4.1	I	6.1	0				28	17
1572	CACODYLIC ACID	6.1	II		50	20	11		13; 28	9; 19
1573	CALCIUM ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1574	CALCIUM ARSENATE AND CALCIUM ARSENITE MIXTURE, SOLID	6.1	II		50	20	11		13; 28	9; 19
1575	CALCIUM CYANIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1577	CHLORODINITRO-BENZENES, LIQUID	6.1	II		50	20			13; 28	9; 19
1578	CHLORONITRO-BENZENES, SOLID	6.1	II		50	20	11		13; 28	9; 19
1579	4-CHLORO- <i>o</i> -TOLUIDINE HYDROCHLORIDE, SOLID	6.1	III		100	10		9b	13; 28	9
1580	CHLOROPICRIN	6.1	I		5	200			1; 13; 28	9; 17
1581	CHLOROPICRIN AND METHYL BROMIDE MIXTURE with > 2 % chloropicrin	2.3			10	100			9; 10; 36	7; 17
1582	CHLOROPICRIN AND METHYL CHLORIDE MIXTURE	2.3			10	100			9; 10; 36	7; 17
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1585	COPPER ACETO-ARSENITE	6.1	II		50	20	11		13; 28	9; 19
1586	COPPER ARSENITE	6.1	II		50	20	11		13; 28	9; 19

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1587	COPPER CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1588	CYANIDES, INORGANIC, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1589	CYANOGEN CHLORIDE, STABILIZED	2.3		8	10	100			9; 10; 36	7; 17
1590	DICHLOROANILINES, LIQUID	6.1	II		50	20			13; 28	9; 19
1591	o-DICHLOROBENZENE	6.1	III		100	10			13; 28	9
1593	DICHLOROMETHANE	6.1	III		100	10			13; 28	9
1594	DIETHYL SULFATE	6.1	II		50	20			13; 28	9; 19
1595	DIMETHYL SULFATE	6.1	I	8	5	200			1; 13; 28	9; 17
1596	DINITROANILINES	6.1	II		50	20	11		13; 28	9; 19
1597	DINITROBENZENES, LIQUID	6.1	II		50	20			13; 28; 31	9; 19
		6.1	III		100	10			13; 28; 31	9
1598	DINITRO-o-CRESOL	6.1	II		50	20	11		13; 28	9; 19
1599	DINITROPHENOL SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1600	DINITROTOLUENES, MOLTEN	6.1	II		50	20			13	9; 19
1601	DISINFECTANT, SOLID, TOXIC, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1602	DYE, LIQUID, TOXIC, N.O.S. or DYE INTERMEDIATE, LIQUID, TOXIC, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1603	ETHYL BROMOACETATE	6.1	II	3	5	200			13; 28	2; 9; 19
1604	ETHYLENEDIAMINE	8	II	3	10	100				2
1605	ETHYLENE DIBROMIDE	6.1	I		5	200			1; 13; 28	9; 17
1606	FERRIC ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1607	FERRIC ARSENITE	6.1	II		50	20	11		13; 28	9; 19
1608	FEROUS ARSENATE	6.1	II		50	20	11		13; 28	9; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1611	HEXAETHYL TETRA-PHOSPHATE	6.1	II		50	20			13; 28	9; 19
1612	HEXAETHYL TETRA-PHOSPHATE AND COMPRESSED GAS MIXTURE	2.3			10	100			9; 10; 36	7; 17
1613	HYDROCYANIC ACID, AQUEOUS SOLUTION (HYDROGEN CYANIDE, AQUEOUS SOLUTION) with ≤ 20 % hydrogen cyanide	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1614	HYDROGEN CYANIDE, STABILIZED, containing < 3 % water and absorbed in a porous inert material	6.1	I	3	5	200			1; 13; 28	2; 9; 10; 17
1616	LEAD ACETATE	6.1	III		100	10		9b	13; 28	9
1617	LEAD ARSENATES	6.1	II		50	20	11		13; 28	9; 19
1618	LEAD ARSENITES	6.1	II		50	20	11		13; 28	9; 19
1620	LEAD CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1621	LONDON PURPLE	6.1	II		50	20	11		13; 28	9; 19
1622	MAGNESIUM ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1623	MERCURIC ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1624	MERCURIC CHLORIDE	6.1	II		50	20	11		13; 28	9; 19
1625	MERCURIC NITRATE	6.1	II		50	20	11		13; 28	9; 19
1626	MERCURIC POTASSIUM CYANIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1627	MERCUROUS NITRATE	6.1	II		50	20	11		13; 28	9; 19
1629	MERCURY ACETATE	6.1	II		50	20	11		13; 28	9; 19
1630	MERCURY AMMONIUM CHLORIDE	6.1	II		50	20	11		13; 28	9; 19
1631	MERCURY BENZOATE	6.1	II		50	20	11		13; 28	9; 19
1634	MERCURY BROMIDES	6.1	II		50	20	11		13; 28	9; 19
1636	MERCURY CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1637	MERCURY GLUCONATE	6.1	II		50	20	11		13; 28	9; 19
1638	MERCURY IODIDE	6.1	II		50	20	11		13; 28	9; 19
1639	MERCURY NUCLEATE	6.1	II		50	20	11		13; 28	9; 19
1640	MERCURY OLEATE	6.1	II		50	20	11		13; 28	9; 19
1641	MERCURY OXIDE	6.1	II		50	20	11		13; 28	9; 19
1642	MERCURY OXY-CYANIDE, DESENSITIZED	6.1	II		50	20	11		13; 28	9; 19
1643	MERCURY POTASSIUM IODIDE	6.1	II		50	20	11		13; 28	9; 19
1644	MERCURY SALICYLATE	6.1	II		50	20	11		13; 28	9; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1645	MERCURY SULFATE	6.1	II		50	20	11		13; 28	9; 19
1646	MERCURY THIO-CYANATE	6.1	II		50	20	11		13; 28	9; 19
1647	METHYL BROMIDE AND ETHYLENE DIBROMIDE MIXTURE, LIQUID	6.1	I		5	200			1; 13; 28	9; 17
1648	ACETONITRILE	3	II		500	2				2; 20
1649	MOTOR FUEL ANTI-KNOCK MIXTURE	6.1	I		5	200			1; 13; 28	9; 17
1650	beta-NAPHTHYLAMINE, SOLID	6.1	II		50	20	11		13; 28	9; 19
1651	NAPHTHYLTHIOUREA	6.1	II		50	20	11		13; 28	9; 19
1652	NAPHTHYLUREA	6.1	II		50	20	11		13; 28	9; 19
1653	NICKEL CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1654	NICOTINE	6.1	II		50	20			13; 28	9; 19
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
1656	NICOTINE HYDRO-CHLORIDE, LIQUID or SOLUTION	6.1	II		50	20			13; 28; 31	9; 19
		6.1	III		100	10			13; 28; 31	9
1657	NICOTINE SALICYLATE	6.1	II		50	20	11		13; 28	9; 19
1658	NICOTINE SULFATE, SOLUTION	6.1	II		50	20			13; 28; 31	9; 19
		6.1	III		100	10			13; 28; 31	9
1659	NICOTINE TARTRATE	6.1	II		50	20	11		13; 28	9; 19
1660	NITRIC OXIDE, COMPRESSED	2.3		5.1 8	10	100			9; 10; 36	7; 17
1661	NITROANILINES (o-, m-, p-)	6.1	II		50	20	11		13; 28	9; 19
1662	NITROBENZENE	6.1	II		50	20			13; 28	9; 19
1663	NITROPHENOLS (o-, m-, p-)	6.1	III		100	10		9b	13; 28	9
1664	NITROTOLUENES, LIQUID	6.1	II		50	20			13; 28	9; 19
1665	NITROXYLENES, LIQUID	6.1	II		50	20			13; 28	9; 19
1669	PENTACHLOROETHANE	6.1	II		50	20			13; 28	9; 19
1670	PERCHLOROMETHYL MERCAPTAN	6.1	I		5	200			1; 13; 28	9; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1671	PHENOL, SOLID	6.1	II		50	20	11		13; 28	9; 19
1672	PHENYL CARBYLAMINE CHLORIDE	6.1	I		5	200			1; 13; 28	9; 17
1673	PHENYLENEDIAMINES (o-, m-, p-)	6.1	III		100	10		9b	13; 28	9
1674	PHENYLMERCURIC ACETATE	6.1	II		50	20	11		13; 28	9; 19
1677	POTASSIUM ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1678	POTASSIUM ARSENITE	6.1	II		50	20	11		13; 28	9; 19
1679	POTASSIUM CUPRO-CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1680	POTASSIUM CYANIDE, SOLID	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1683	SILVER ARSENITE	6.1	II		50	20	11		13; 28	9; 19
1684	SILVER CYANIDE	6.1	II		50	20	11		13; 28	9; 19
1685	SODIUM ARSENATE	6.1	II		50	20	11		13; 28	9; 19
1686	SODIUM ARSENITE, AQUEOUS SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1687	SODIUM AZIDE	6.1	II		50	20	11		13; 28	9; 19
1688	SODIUM CACODYLATE	6.1	II		50	20	11		13; 28	9; 19
1689	SODIUM CYANIDE, SOLID	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1690	SODIUM FLUORIDE, SOLID	6.1	III		100	10		9b	13; 28	9
1691	STRONTIUM ARSENITE	6.1	II		50	20	11		13; 28	9; 19
1692	STRYCHNINE or STRYCHNINE SALTS	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1693	TEAR GAS SUBSTANCE, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
1694	BROMOBENZYL CYANIDES, LIQUID	6.1	I		5	200			1; 13; 28	9; 17
1695	CHLOROACETONE, STABILIZED	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1697	CHLOROACETOPHENONE, SOLID	6.1	II		50	20	11		13; 28	9; 19
1698	DIPHENYLAMINE CHLOROARSINE	6.1	I		5	200			1; 13; 28	9; 17
1699	DIPHENYLCHLOROARSINE, LIQUID	6.1	1		5	200			1; 13; 28	9; 17
1700	TEAR GAS CANDLES	6.1	II	4.1	5	200			13; 28	9; 19
1701	XYLYL BROMIDE, LIQUID	6.1	II		50	20			13; 28	9; 19

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1702	1,1,2,2-TETRACHLORO-ETHANE	6.1	II		50	20			13; 28	9; 19
1704	TETRAETHYL DITHIO-PYROPHOSPHATE	6.1	II		50	20	11		13; 28	9; 19
1707	THALLIUM COMPOUND, N.O.S.	6.1	II		50	20	11		13; 28	9; 19
1708	TOLUIDINES, LIQUID	6.1	II		50	20			13; 28	9; 19
1709	2,4-TOLUYLENE-DIAMINE, SOLID	6.1	III		100	10		9b	13; 28	9
1710	TRICHLOROETHYLENE	6.1	III		100	10			13; 28	9
1711	XYLIDINES, LIQUID	6.1	II		50	20			13; 28	9; 19
1712	ZINC ARSENATE, ZINC ARSENITE or ZINC ARSENATE AND ZINC ARSENITE MIXTURE	6.1	II		50	20	11		13; 28	9; 19
1713	ZINC CYANIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
1714	ZINC PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
1715	ACETIC ANHYDRIDE	8	II	3	10	100				2
1716	ACETYL BROMIDE	8	II		50	20				
1717	ACETYL CHLORIDE	3	II	8	200	5				2; 20
1718	BUTYL ACID PHOSPHATE	8	III		200	5				
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8	II		50	20				
		8	III		200	5				
1722	ALLYL CHLORO-FORMATE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
1723	ALLYL IODIDE	3	II	8	200	5				2; 20
1724	ALLYLTRICHLORO-SILANE, STABILIZED	8	II	3	10	100				2
1725	ALUMINIUM BROMIDE, ANHYDROUS	8	II		50	20	11			
1726	ALUMINIUM CHLORIDE, ANHYDROUS	8	II		50	20	11			
1727	AMMONIUM HYDROGEN-DIFLUORIDE, SOLID	8	II		50	20	11			
1728	AMYLTRICHLORO-SILANE	8	II		50	20				
1729	ANISOYL CHLORIDE	8	II		50	20	11			

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1730	ANTIMONY PENTA-CHLORIDE, LIQUID	8	II		50	20				
1731	ANTIMONY PENTA-CHLORIDE SOLUTION	8	II		50	20				
		8	III		200	5				
1732	ANTIMONY PENTA-FLUORIDE	8	II	6.1	10	100			13; 28	
1733	ANTIMONY TRI-CHLORIDE	8	II		50	20	11			
1736	BENZOYL CHLORIDE	8	II		50	20				
1737	BENZYL BROMIDE	6.1	II	8	5	200			13; 28	9; 19
1738	BENZYL CHLORIDE	6.1	II	8	5	200			13; 28	9; 19
1739	BENZYL CHLORO-FORMATE	8	I		20	50				20
1740	HYDROGEN-DIFLUORIDES, N.O.S.	8	II		50	20	11	-		
		8	III		200	5	-	9b		
1741	BORON TRICHLORIDE	2.3		8	10	100			9; 10; 36	7; 17
1742	BORON TRIFLUORIDE ACETIC ACID COMPLEX, LIQUID	8	II		50	20				
1743	BORON TRIFLUORIDE PROPIONIC ACID COMPLEX, LIQUID	8	II		50	20				
1744	BROMINE or BROMINE SOLUTION	8	I	6.1	5	200			13; 28	17
1745	BROMINE PENTA-FLUORIDE	5.1	I	6.1 8	0				24; 28	20
1746	BROMINE TRIFLUORIDE	5.1	I	6.1 8	0				24; 28	20
1747	BUTYLTRICHLORO-SILANE	8	II	3	10	100				2
1748	CALCIUM HYPO-CHLORITE, DRY or CALCIUM HYPO-CHLORITE MIXTURE, DRY with > 39 % available chlorine (8,8 % available oxygen)	5.1	II		50	20	11		24; 35	
		5.1	III		200	5	-		24; 35	
1749	CHLORINE TRIFLUORIDE	2.3		5.1 8	10	100			9; 10; 36	7; 17
1750	CHLOROACETIC ACID SOLUTION	6.1	II	8	5	200			13; 28	9; 19
1751	CHLOROACETIC ACID, SOLID	6.1	II	8	5	200			13; 28	9; 19
1752	CHLOROACETYL CHLORIDE	6.1	I	8	5	200			1; 13; 28	9; 17
1753	CHLOROPHENYL-TRICHLOROSILANE	8	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1754	CHLOROSULFONIC ACID (with or without sulfur trioxide)	8	I		20	50				20
1755	CHROMIC ACID SOLUTION	8	II		50	20				
		8	III		200	5				
1756	CHROMIC FLUORIDE, SOLID	8	II		50	20	11			
1757	CHROMIC FLUORIDE SOLUTION	8	II		50	20				
		8	III		200	5				
1758	CHROMIUM OXY-CHLORIDE	8	I		20	50				20
1759	CORROSIVE SOLID, N.O.S.	8	I		20	50	10; 12	-		20
		8	II		50	20	11	-		-
		8	III		200	5	-	9b		-
1760	CORROSIVE LIQUID, N.O.S.	8	I		20	50				20
		8	II		50	20				-
		8	III		200	5				-
1761	CUPRIETHYLENE-DIAMINE SOLUTION	8	II	6.1	10	100			13; 28	
		8	III	6.1	50	20			13; 28	
1762	CYCLOHEXYLTRI-CHLOROSILANE	8	II		50	20				
1763	CYCLOHEXYLTRI-CHLOROSILANE	8	II		50	20				
1764	DICHLOROACETIC ACID	8	II		50	20				
1765	DICHLOROACETYL CHLORIDE	8	II		50	20				
1766	DICHLOROPHENYL-TRICHLOROSILANE	8	II		50	20				
1767	DIETHYLDICHLORO-SILANE	8	II	3	10	100				2
1768	DIFLUOROPHOSPHORIC ACID, ANHYDROUS	8	II		50	20				
1769	DIPHENYLDICHLORO-SILANE	8	II		50	20				
1770	DIPHENYLMETHYL BROMIDE	8	II		50	20	11			
1771	DODECYLTRICHLORO-SILANE	8	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1773	FERRIC CHLORIDE, ANHYDROUS	8	III		200	5		9b		
1774	FIRE EXTINGUISHER CHARGES, corrosive liquid	8	II		50	20				
1775	FLUOROBORIC ACID	8	II		50	20				
1776	FLUOROPHOSPHORIC ACID, ANHYDROUS	8	II		50	20				
1777	FLUOROSULFONIC ACID	8	I		20	50				20
1778	FLUOROSILICIC ACID	8	II		50	20				
1779	FORMIC ACID	8	II		50	20				
1780	FUMARYL CHLORIDE	8	II		50	20				
1781	HEXADECYLTRICHLOROSILANE	8	II		50	20				
1782	HEXAFLUOROPHOSPHORIC ACID	8	II		50	20				
1783	HEXAMETHYLENE-DIAMINE SOLUTION	8	II		50	20				
		8	III		200	5				
1784	HEXYLTRICHLOROSILANE	8	II		50	20				
1786	HYDROFLUORIC ACID AND SULFURIC ACID MIXTURE	8	I	6.1	5	200			13; 28	20
1787	HYDRIODIC ACID	8	II		50	20				
		8	III		200	5				
1788	HYDROBROMIC ACID	8	II		50	20				
		8	III		200	5				
1789	HYDROCHLORIC ACID	8	II		50	20				
		8	III		200	5				
1790	HYDROFLUORIC ACID with > 60 % hydrogen fluoride	8	I	6.1	5	200			13; 28	17
		8	II	6.1	10	100			13; 28	
1791	HYPOCHLORITE SOLUTION	8	II		50	20				
		8	III		200	5				
1792	IODINE MONO-CHLORIDE	8	II		50	20	11			
1793	ISOPROPYL ACID PHOSPHATE	8	III		200	5				

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1794	LEAD SULFATE with > 3 % free acid	8	II		50	20	11	9a		
1796	NITRATING ACID MIXTURE with > 50 % nitric acid	8	I	5.1	5	200			24	20
	NITRATING ACID MIXTURE with ≤ 50 % nitric acid	8	II		50	20				
1798	NITROHYDROCHLORIC ACID	8	I	CARRIAGE PROHIBITED						
1799	NONYLTRICHLORO-SILANE	8	II		50	20				
1800	OCTADECYLTRI-CHLOROSILANE	8	II		50	20				
1801	OCTYLTRICHLORO-SILANE	8	II		50	20				
1802	PERCHLORIC ACID with ≤ 50 % acid, by mass	8	II	5.1	10	100			24	
1803	PHENOLSULFONIC ACID, LIQUID	8	II		50	20				
1804	PHENYLTRICHLORO-SILANE	8	II		50	20				
1805	PHOSPHORIC ACID, SOLUTION	8	III		200	5				
1806	PHOSPHORUS PENTACHLORIDE	8	II		50	20	11			
1807	PHOSPHORUS PENTOXIDE	8	II		50	20	11			
1808	PHOSPHORUS TRIBROMIDE	8	II		50	20				
1809	PHOSPHORUS TRICHLORIDE	6.1	I	8	5	200			1; 13; 28	9; 17
1810	PHOSPHORUS OXYCHLORIDE	8	II		50	20				
1811	POTASSIUM HYDROGENDIFLUORIDE, SOLID	8	II	6.1	10	100	11		13; 28	
1812	POTASSIUM FLUORIDE, SOLID	6.1	III		100	10		9b	13; 28	9
1813	POTASSIUM HYDROXIDE, SOLID	8	II		50	20	11			
1814	POTASSIUM HYDROXIDE SOLUTION	8	II		50	20				
		8	III		200	5				
1815	PROPIONYL CHLORIDE	3	II	8	200	5				2; 20
1816	PROPYLTRICHLORO-SILANE	8	II	3	10	100				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1817	PYROSULFURYL CHLORIDE	8	II		50	20				
1818	SILICON TETRA-CHLORIDE	8	II		50	20				
1819	SODIUM ALUMINATE SOLUTION	8	II		50	20				
		8	III		200	5				
1823	SODIUM HYDROXIDE, SOLID	8	II		50	20	11			
1824	SODIUM HYDROXIDE SOLUTION	8	II		50	20				
		8	III		200	5				
1825	SODIUM MONOXIDE	8	II		50	20	11			
1826	NITRATING ACID MIXTURE, SPENT with > 50 % nitric acid	8	I	5.1	5	200			24	20
	NITRATING ACID MIXTURE, SPENT with ≤ 50 % nitric acid	8	II		50	20				
1827	STANNIC CHLORIDE, ANHYDROUS	8	II		50	20				
1828	SULFUR CHLORIDES	8	I		20	50				20
1829	SULFUR TRIOXIDE, STABILIZED	8	I		20	50				20
1830	SULFURIC ACID with > 51 % acid	8	II		50	20				
1831	SULFURIC ACID, FUMING	8	I	6.1	5	200			13; 28	20
1832	SULFURIC ACID, SPENT	8	II		50	20				
1833	SULFUROUS ACID	8	II		50	20				
1834	SULFURYL CHLORIDE	8	I		20	50				20
1835	TETRAMETHYL-AMMONIUM HYDROXIDE, SOLUTION	8	II		50	20				
		8	III		200	5				
1836	THIONYL CHLORIDE	8	I		20	50				20
1837	THIOPHOSPHORYL CHLORIDE	8	II		50	20				
1838	TITANIUM TETRA-CHLORIDE	8	II		50	20				
1839	TRICHLOROACETIC ACID	8	II		50	20	11			
1840	ZINC CHLORIDE SOLUTION	8	III		200	5				
1841	ACETALDEHYDE AMMONIA	9	III		500	2		3		

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1843	AMMONIUM DINITRO- <i>o</i> -CRESOLATE	6.1	II		50	20	11		13; 28	9; 19
1845	CARBON DIOXIDE, solid (Dry ice)	9	Non-dangerous for road transport							
1846	CARBON TETRA-CHLORIDE	6.1	II		50	20			13; 28	9; 19
1847	POTASSIUM SULFIDE, HYDRATED with ≥ 30 % water of crystallization	8	II		50	20	11			
1848	PROPIONIC ACID	8	III		200	5				
1849	SODIUM SULFIDE, HYDRATED with ≥ 30 % water	8	II		50	20	11			
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1854	BARIUM ALLOYS, PYROPHORIC	4.2	I		0		1			20
1855	CALCIUM, PYROPHORIC or CALCIUM ALLOYS, PYROPHORIC	4.2	I		0		1			20
1856	Rags, oily	4.2	Non-dangerous for road transport							
1857	Textile waste, wet	4.2	Non-dangerous for road transport							
1858	HEXAFLUOROPROPYLENE (REFRIGERANT GAS R 1216)	2.2			500	2			9; 10; 36	
1859	SILICON TETRA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
1860	VINYL FLUORIDE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
1862	ETHYL CROTONATE	3	II		500	2				2; 20
1863	FUEL, AVIATION, TURBINE ENGINE	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1000	1				2
1865	n-PROPYL NITRATE	3	II		500	2				2; 20
1866	RESIN SOLUTION, flammable	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1868	DECABORANE	4.1	II	6.1	10	100	11; 12		28	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1869	MAGNESIUM or MAGNESIUM ALLOYS with > 50 % magnesium in pellets, turnings or ribbons	4.1	III		500	2		1		
1870	POTASSIUM BOROHYDRIDE	4.3	I		0		1		23	20
1871	TITANIUM HYDRIDE	4.1	II		50	20				
1872	LEAD DIOXIDE	5.1	III	6.1	100	10			24; 28	
1873	PERCHLORIC ACID with > 50 % but ≤ 72 % acid, by mass	5.1	I	8	0				24	20
1884	BARIUM OXIDE	6.1	III		100	10		9a	13; 28	9
1885	BENZIDINE	6.1	II		50	20	11		13; 28	9; 19
1886	BENZYLIDENE CHLORIDE	6.1	II		50	20			13; 28	9; 19
1887	BROMOCHLORO-METHANE	6.1	III		100	10			13; 28	9
1888	CHLOROFORM	6.1	III		100	10			13; 28	9
1889	CYANOGEN BROMIDE	6.1	I	8	5	200			1; 13; 28	9; 17
1891	ETHYL BROMIDE	6.1	II		50	20			13; 28	9; 19
1892	ETHYLDICHLORO-ARSINE	6.1	I		5	200			1; 13; 28	9; 17
1894	PHENYLMERCURIC HYDROXIDE	6.1	II		50	20	11		13; 28	9; 19
1895	PHENYLMERCURIC NITRATE	6.1	II		50	20	11		13; 28	9; 19
1897	TETRACHLORO-ETHYLENE	6.1	III		100	10			13; 28	9
1898	ACETYL IODIDE	8	II		50	20				
1902	DIISOCTYL ACID PHOSPHATE	8	III		200	5				
1903	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.	8	I		20	50				20
		8	II		50	20				-
		8	III		200	5				-
1905	SELENIC ACID	8	I		20	50	10; 12			20
1906	SLUDGE ACID	8	II		50	20				
1907	SODA LIME with > 4 % sodium hydroxide	8	III		200	5		9b		
1908	CHLORITE SOLUTION	8	II		50	20				
		8	III		200	5				
1910	Calcium oxide	8	III		Non-dangerous for road transport					

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1911	DIBORANE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1912	METHYL CHLORIDE AND METHYLENE CHLORIDE MIXTURE	2.1			100	10			9; 10; 36	2; 20
1913	NEON, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
1914	BUTYL PROPIONATES	3	III		1 000	1				2
1915	CYCLOHEXANONE	3	III		1 000	1				2
1916	2,2'-DICHLORODIETHYL ETHER	6.1	II	3	5	200			13; 28	2; 9; 19
1917	ETHYL ACRYLATE, STABILIZED	3	II		500	2				2; 20
1918	ISOPROPYLBENZENE	3	III		1 000	1				2
1919	METHYL ACRYLATE, STABILIZED	3	II		500	2				2; 20
1920	NONANES	3	III		1 000	1				2
1921	PROPYLENEIMINE, STABILIZED	3	I	6.1	50	20			13; 28	2; 19
1922	PYRROLIDINE	3	II	8	200	5				2; 20
1923	CALCIUM DITHIONITE (CALCIUM HYDRO-SULFITE)	4.2	II		100	10	1; 12			
1928	METHYL MAGNESIUM BROMIDE IN ETHYL ETHER	4.3	I	3	0		1		23	2; 20
1929	POTASSIUM DITHIONITE (POTASSIUM HYDRO-SULFITE)	4.2	II		100	10	1; 12			
1931	ZINC DITHIONITE (ZINC HYDROSULFITE)	9	III		500	2		3		
1932	ZIRCONIUM SCRAP	4.2	III		200	5	1	4		
1935	CYANIDE, SOLUTION, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
1938	BROMOACETIC ACID, SOLUTION	8	II		50	20				
		8	III		200	5				
1939	PHOSPHORUS OXYBROMIDE	8	II		50	20	11			
1940	THIOGLYCOLIC ACID	8	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1941	DIBROMODIFLUORO-METHANE	9	III		500	2				
1942	AMMONIUM NITRATE with ≤ 0,2 % total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance	5.1	III		200	5		8	24	
1944	MATCHES, SAFETY (book, card or strike on box)	4.1	III		500	2				
1945	MATCHES, WAX 'VESTA'	4.1	III		500	2				
1950	AEROSOLS, flammable	2.1			100	10			9; 12	2
	AEROSOLS, toxic, flammable	2.1		6.1	20	50			9; 12; 28	2; 7
	AEROSOLS, flammable, corrosive	2.1		8	20	50			9; 12	2
	AEROSOLS, toxic, flammable, corrosive	2.1		6.1 8	20	50			9; 12; 28	2; 7
	AEROSOLS, asphyxiant	2.2			500	2			9; 12	
	AEROSOLS, oxidizing	2.2			5.1	200	5		9; 12	
	AEROSOLS, toxic	2.2			6.1	200	5		9; 12; 28	7
1950	AEROSOLS, corrosive	2.2			8.1	200	5		9; 12	
	AEROSOLS, toxic, oxidizing	2.2			5.1 8	200	5		9; 12; 28	7
	AEROSOLS, corrosive, oxidizing	2.2			5.1 8	200	5		9; 12	
	AEROSOLS, toxic, corrosive	2.2			6.1 8	200	5		9; 12; 28	7
	AEROSOLS, toxic, oxidizing, corrosive	2.2			5.1 6.1 8	200	5		9; 12; 28	7
1951	ARGON, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
1952	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with ≤ 9 % ethylene oxide	2.2			500	2			9; 10; 36	
1953	COMPRESSED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3		2.1	10	100			9; 10; 36	2; 7; 17
1954	COMPRESSED GAS, FLAMMABLE, N.O.S.	2.1			100	10			9; 10; 36	2
1955	COMPRESSED GAS, TOXIC, N.O.S.	2.3			10	100			9; 10; 36	7; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1956	COMPRESSED GAS, N.O.S.	2.2			500	2			9; 10; 36	
1957	DEUTERIUM, COMPRESSED	2.1			100	10			9; 10; 36	2
1958	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 114)	2.2			500	2			9; 10; 36	
1959	1,1-DIFLUORO-ETHYLENE (REFRIGERANT GAS R 1132a)	2.1			100	10			9; 10; 36	2; 20
1961	ETHANE, REFRIGERATED LIQUID	2.1			100	10	5		9; 11; 36	2; 17
1962	ETHYLENE	2.1			100	10			9; 10; 36	2
1963	HELIUM, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
1964	HYDROCARBON GAS MIXTURE, COMPRESSED, N.O.S.	2.1			100	10			9; 10; 36	2
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S.	2.1			100	10			9; 10; 36	2; 20
1966	HYDROGEN, REFRIGERATED LIQUID	2.1			100	10	5		9; 11; 36	2; 17
1967	INSECTICIDE GAS, TOXIC, N.O.S.	2.3			10	100			9; 10; 36	2; 17
1968	INSECTICIDE GAS, N.O.S.	2.2			500	2			9; 10; 36	
1969	ISOBUTANE	2.1			100	10			9; 10; 36	2; 20
1970	KRYPTON, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
1971	METHANE, COMPRESSED or NATURAL GAS, COMPRESSED with high methane content	2.1			100	10			9; 10; 36	2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1972	METHANE, REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID with high methane content	2.1			100	10	5		9; 11; 36	2; 17
1973	CHLORODIFLUORO-METHANE AND CHLOROPENTA-FLUOROETHANE MIXTURE with fixed boiling point, with ca 49 % chlorodifluoro-methane (REFRIGERANT GAS R 502)	2.2			500	2			9; 10; 36	
1974	CHLORODIFLUORO-BROMOMETHANE (REFRIGERANT GAS R 12B1)	2.2			500	2			9; 10; 36	
1975	NITRIC OXIDE AND DINITROGEN TETROXIDE MIXTURE	2.3		5.1 8	10	100			9; 10; 36	7; 17
1976	OCTAFLUOROCYCLO-BUTANE (REFRIGERANT GAS RC 318)	2.2			500	2			9; 10; 36	
1977	NITROGEN, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
1978	PROPANE	2.1			100	10			9; 10; 36	2; 20
1979	RARE GASES MIXTURE, COMPRESSED (e.g. Argon; Helium; Krypton; Neon; Xenon)	2.2			500	2			9; 10; 36	
1980	RARE GASES AND OXYGEN MIXTURE, COMPRESSED	2.2			500	2			9; 10; 36	
1981	RARE GASES AND NITROGEN MIXTURE, COMPRESSED	2.2			500	2			9; 10; 36	
1982	TETRAFLUORO-METHANE (REFRIGERANT GAS R 14)	2.2			500	2			9; 10; 36	
1983	1-CHLORO-2,2,2-TRI-FLUOROETHANE (REFRIGERANT GAS R 133a)	2.2			500	2			9; 10; 36	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
1984	TRIFLUOROMETHANE (REFRIGERANT GAS R 23)	2.2			500	2			9; 10; 36	
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
1987	ALCOHOLS, N.O.S.	3	II		25	40				2; 20
		3	III		25	40				2
1988	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
1989	ALDEHYDES, N.O.S.	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1990	BENZALDEHYDE	9	III		500	2				
1991	CHLOROPRENE, STABILIZED	3	I	6.1	50	20			13; 28	2; 19
1992	FLAMMABLE LIQUID, TOXIC, N.O.S.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
1993	FLAMMABLE LIQUID, N.O.S.	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
1994	IRON PENTACARBONYL	6.1	I	3	5	200			1; 13; 28	2; 9; 17
1999	TARS, LIQUID, including road asphalt and oils, bitumen and cut backs	3	II		500	2				2; 20
		3	III		1 000	1				2
2000	CELLULOID in block, rods, rolls, sheets, tubes, etc., except scrap	4.1	III		500	2				
2001	COBALT NAPHTHENATES, POWDER	4.1	III		500	2		1		
2002	CELLULOID, SCRAP	4.2	III		200	5	1			
2004	MAGNESIUM DIAMIDE	4.2	II		100	10	1; 12			
2005	MAGNESIUM DIPHENYL	4.2	I	4.3	0		1			20
2006	PLASTICS, NITROCELLULOSE-BASED, SELF-HEATING, N.O.S.	4.2	III		200	5	1			

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2008	ZIRCONIUM POWDER, DRY	4.2	I		0	–	1	–		20
		4.2	II		100	10	1; 12	–		–
		4.2	III		200	5	1	4		–
2009	ZIRCONIUM, DRY, finished sheets, strip or coiled wire	4.2	III		200	5	1	4		
2010	MAGNESIUM HYDRIDE	4.3	I		0		1		23	20
2011	MAGNESIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
2012	POTASSIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
2013	STRONTIUM PHOSPHIDE	4.3	I	6.1	0		1		23; 28	20
2014	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with ≥ 20 % and ≤ 60 % hydrogen peroxide (stabilized as necessary)	5.1	II	8	20	50			24	
2015	HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED with > 60 % hydrogen peroxide	5.1	I	8	0		5		24	20
2016	AMMUNITION, TOXIC, NON-EXPLOSIVE without burster or expelling charge, non-fuzed	6.1	II		50	20			13; 28	9; 19
2017	AMMUNITION, TEAR-PRODUCING, NON-EXPLOSIVE without burster or expelling charge, non-fuzed	6.1	II	8	5	200			13; 28	9; 19
2018	CHLOROANILINES, SOLID	6.1	II		50	20	11		13; 28	9; 19
2019	CHLOROANILINES, LIQUID	6.1	II		50	20			13; 28	9; 19
2020	CHLOROPHENOLS, SOLID	6.1	III		100	10		9b	13; 28	9
2021	CHLOROPHENOLS, LIQUID	6.1	III		100	10			13; 28	9
2022	CRESYLIC ACID	6.1	II	8	5	200			13; 28	9; 19
2023	EPICHLOROHYDRIN	6.1	II	3	5	200			13; 28	2; 9; 19
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2027	SODIUM ARSENITE, SOLID	6.1	II		50	20	11		13; 28	9; 19
2028	BOMBS, SMOKE, NON-EXPLOSIVE with corrosive liquid, without initiating device	8	II		50	20				
2029	HYDRAZINE, ANHYDROUS	8	I	3 6.1	5	200			13; 28	2; 20
2030	HYDRAZINE AQUEOUS SOLUTION, with > 37 % hydrazine, by mass	8	I	6.1	5	200			13; 28	
		8	II	6.1	10	100			13; 28	
		8	III	6.1	50	20			13; 28	
2031	NITRIC ACID, other than red fuming, with > 70 % nitric acid	8	I	5.1	5	200			24	20
	NITRIC ACID, other than red fuming, with ≤ 70 % nitric acid	8	II		50	20				
2032	NITRIC ACID, RED FUMING	8	I	5.1 6.1	5	200			13; 24; 28	20
2033	POTASSIUM MONOXIDE	8	II		50	20	11			
2034	HYDROGEN AND METHANE MIXTURE, COMPRESSED	2.1			100	10			9; 10; 36	2
2036	XENON	2.2			500	2			9; 10; 36	
2037	RECEPTACLES, SMALL, CONTAINING GAS (flammable) without a release device, non-refillable	2.1			100	10			9; 12	2
	RECEPTACLES, SMALL, CONTAINING GAS (toxic, flammable and corrosive) without a release device, non-refillable	2.3		2.1 8	10	100			9; 12	2; 7

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2037	RECEPTACLES, SMALL, CONTAINING GAS (toxic and oxidizing) without a release device, non-refillable	2.3		5.1	10	100			9; 12	7
	RECEPTACLES, SMALL, CONTAINING GAS (toxic, oxidizing and corrosive) without a release device, non-refillable	2.3		5.1 8	10	100			9; 12	7
	RECEPTACLES, SMALL, CONTAINING GAS (oxidizing) without a release device, non-refillable	2.2		5.1	200	5			9; 12	
	RECEPTACLES, SMALL, CONTAINING GAS (toxic) without a release device, non-refillable	2.3			10	100			9; 12	7
	RECEPTACLES, SMALL, CONTAINING GAS (toxic and corrosive) without a release device, non-refillable	2.3		8	10	100			9; 12	7
	RECEPTACLES, SMALL, CONTAINING GAS (non-flammable) without a release device, non-refillable	2.2			500	2			9; 12	
	RECEPTACLES, SMALL, CONTAINING GAS (toxic and flammable) without a release device, non-refillable	2.3		2.1	10	100			9; 12	2; 7
2038	DINITROTOLUENES, LIQUID	6.1	II		50	20			13; 28	9; 19
2044	2,2-DIMETHYLPROPANE	2.1			100	10			9; 10; 36	2; 20
2045	ISOBUTYRALDEHYDE (ISOBUTYL ALDEHYDE)	3	II		500	2				2; 20
2046	CYMENES	3	III		1 000	1				2
2047	DICHLOROPROPENES	3	II		500	2				2; 20
		3	III		1 000	1				2
2048	DICYCLOPENTADIENE	3	III		1 000	1				2
2049	DIETHYLBENZENE	3	III		1 000	1				2
2050	DIISOBUTYLENE, ISOMERIC COMPOUNDS	3	II		500	2				2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2051	2-DIMETHYLAMINO-ETHANOL	8	II	3	10	100				2
2052	DIPENTENE	3	III		1 000	1				2
2053	METHYL ISOBUTYL CARBINOL	3	III		1 000	1				2
2054	MORPHOLINE	8	I	3	5	200				2; 20
2055	STYRENE MONOMER, STABILIZED	3	III		1 000	1				2
2056	TETRAHYDROFURAN	3	II		500	2				2; 20
2057	TRIPROPYLENE	3	II		500	2				2; 20
		3	III		1 000	1				2
2058	VALERALDEHYDE	3	II		500	2				2; 20
2059	NITROCELLULOSE SOLUTION, FLAMMABLE with ≤ 12,6 % nitrogen, by dry mass, and ≤ 55 % nitrocellulose	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
2067	AMMONIUM NITRATE BASED FERTILIZER	5.1	III		200	5		8	24	
2071	Ammonium nitrate based fertilizer, uniform mixtures of the nitrogen/phosphate, nitrogen/potash or nitrogen/phosphate/potash type, containing ≤ 70 % ammonium nitrate and ≤ 0,4 % total combustible/organic material calculated as carbon or with ≤ 45 % ammonium nitrate and unrestricted combustible material	9	III				Non-dangerous for road transport			
2073	AMMONIA SOLUTION, relative density < 0,880 at 15 °C in water, with > 35 % ≤ 50 % ammonia	2.2			500	2			9; 10	
2074	ACRYLAMIDE, SOLID	6.1	III		100	10		9b	13; 28	9
2075	CHLORAL, ANHYDROUS, STABILIZED	6.1	II		50	20			13; 28	9; 19
2076	CRESOLS, LIQUID	6.1	II	8	5	200			13; 28	9; 19
2077	alpha-NAPHTHYLAMINE	6.1	III		100	10		9b	13; 28	9
2078	TOLUENE DIISO-CYANATE	6.1	II		50	20			13; 28	9; 19
2079	DIETHYLENETRIAMINE	8	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2186	HYDROGEN CHLORIDE, REFRIGERATED LIQUID	2.3	CARRIAGE PROHIBITED							
2187	CARBON DIOXIDE, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
2188	ARSINE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2189	DICHLOROSILANE	2.3		2.1 8	10	100			9; 10; 36	2; 7; 17
2190	OXYGEN DIFLUORIDE, COMPRESSED	2.3		5.1 8	10	100			9; 10; 36	7; 17
2191	SULFURYL FLUORIDE	2.3			10	100			9; 10; 36	7; 17
2192	GERMANE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2193	HEXAFLUOROETHANE (REFRIGERANT GAS R 116)	2.2			500	2			9; 10; 36	
2194	SELENIUM HEXA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
2195	TELLURIUM HEXA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
2196	TUNGSTEN HEXA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
2197	HYDROGEN IODIDE, ANHYDROUS	2.3		8	10	100			9; 10; 36	7; 17
2198	PHOSPHORUS PENTA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
2199	PHOSPHINE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2200	PROPADIENE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
2201	NITROUS OXIDE, REFRIGERATED LIQUID	2.2		5.1	200	5	5		9; 11; 36	20
2202	HYDROGEN SELENIDE, ANHYDROUS	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2203	SILANE	2.1			100	10			9; 10; 36	2
2204	CARBONYL SULFIDE	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2205	ADIPONITRILE	6.1	III		100	10			13; 28	9
2206	ISOCYANATES, TOXIC, N.O.S. or ISOCYANATE, SOLUTION, TOXIC, N.O.S.	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2208	CALCIUM HYPO-CHLORITE MIXTURE, DRY with > 10 % but ≤ 39 % available chlorine	5.1	III		200	5			24; 35	
2209	FORMALDEHYDE SOLUTION with ≥ 25 % formaldehyde	8	III		200	5				
2210	MANEB or MANEB PREPARATION with ≥ 60 % maneb	4.2	III	4.3	50	20	1; 12	4		
2211	POLYMERIC BEADS, EXPANDABLE, evolving flammable vapour	9	III		1 000	1		3		
2212	BROWN ASBESTOS (amosite; mysorite) or (BLUE ASBESTOS (crocidolite)	9	II		20	50			1; 13; 28	19
2213	PARAFORMALDEHYDE	4.1	III		500	2	13	1		
2214	PHTHALIC ANHYDRIDE with > 0,05 % maleic anhydride	8	III		200	5		9b		
2215	MALEIC ANHYDRIDE MOLTEN	8	III		200	5				
	MALEIC ANHYDRIDE	8	III		200	5		9b		
2216	Fish meal (Fish scrap), stabilized	9	III	Non-dangerous for road transport						
2217	SEED CAKE with ≤ 1,5 % oil and ≤ 11 % moisture	4.2	III		200	5	1	4		
2218	ACRYLIC ACID, STABILIZED	8	II	3	10	100				2
2219	ALLYL GLYCIDYL ETHER	3	III		1 000	1				2
2222	ANISOLE	3	III		1 000	1				2
2224	BENZONITRILE	6.1	II		50	20			13; 28	9; 19
2225	BENZENESULFONYL CHLORIDE	8	III		200	5				
2226	BENZOTRICHLORIDE	8	II		50	20				
2227	n-BUTYL METHACRYLATE, STABILIZED	3	III		1 000	1				2
2232	2-CHLOROETHANAL	6.1	I		5	200			1; 13; 28	9; 17
2233	CHLOROANISIDINES	6.1	III		100	10		9b	13; 28	9
2234	CHLOROBENZOTRI-FLUORIDES	3	III		1 000	1				2
2235	CHLOROBENZYL CHLORIDES, LIQUID	6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2236	3-CHLORO-4-METHYL-PHENYL ISOCYANATE, LIQUID	6.1	II		50	20			13; 28	9; 19
2237	CHLORONITROANILINES	6.1	III		100	10		9b	13; 28	9
2238	CHLOROTOLUENES	3	III		1 000	1				2
2239	CHLOROTOLUIDINES, SOLID	6.1	III		100	10		9b	13; 28	9
2240	CHROMOSULFURIC ACID	8	I		20	50				20
2241	CYCLOHEPTANE	3	II		500	2				2; 20
2242	CYCLOHEPTENE	3	II		500	2				2; 20
2243	CYCLOHEXYL ACETATE	3	III		1 000	1				2
2244	CYCLOPENTANOL	3	III		1 000	1				2
2245	CYCLOPENTANONE	3	III		1 000	1				2
2246	CYCLOPENTENE	3	II		500	2				2; 20
2247	n-DECANE	3	III		1 000	1				2
2248	DI-n-BUTYLAMINE	8	II	3	10	100				2
2249	DICHLORODIMETHYL ETHER, SYMMETRICAL	6.1	I	CARRIAGE PROHIBITED						
2250	DICHLOROPHENYL ISOCYANATES	6.1	II		50	20	11		13; 28	9; 19
2251	BICYCLO[2.2.1]HEPTA-2,5-DIENE, STABILIZED (2,5-NORBORNADIENE, STABILIZED)	3	II		500	2				2; 20
2252	1,2-DIMETHOXYETHANE	3	II		500	2				2; 20
2253	N,N-DIMETHYLANILINE	6.1	II		50	20			13; 28	9; 19
2254	MATCHES, FUSEE	4.1	III		500	2				
2256	CYCLOHEXENE	3	II		500	2				2; 20
2257	POTASSIUM	4.3	I		0		1		23	20
2258	1,2-PROPYLENE-DIAMINE	8	II	3	10	100				2
2259	TRIETHYLENE-TETRAMINE	8	II		50	20				
2260	TRIPROPYLAMINE	3	III	8	500	2				2
2261	XYLENOLS, SOLID	6.1	II		50	20	11		13; 28	9; 19
2262	DIMETHYLCARBAMOYL CHLORIDE	8	II		50	20				
2263	DIMETHYLCYCLO-HEXANES	3	II		500	2				2; 20
2264	N,N-DIMETHYLCYCLO-HEXYLAMINE	8	II	3	10	100				2
2265	N,N-DIMETHYL-FORMAMIDE	3	III		1 000	1				2

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2266	DIMETHYL-N-PROPYLAMINE	3	II	8	200	5				2; 20
2267	DIMETHYL THIOPHOSPHORYL CHLORIDE	6.1	II	8	5	200			13; 28	9; 19
2269	3,3'-IMINODIPROPYLAMINE	8	III		200	5				
2270	ETHYLAMINE, AQUEOUS SOLUTION with $\geq 50\%$ and $\leq 70\%$ ethylamine	3	II	8	200	5				2; 20
2271	ETHYL AMYL KETONE	3	III		1 000	1				2
2272	N-ETHYLANILINE	6.1	III		100	10			13; 28	9
2273	2-ETHYLANILINE	6.1	III		100	10			13; 28	9
2274	N-ETHYL-N-BENZYLANILINE	6.1	III		100	10			13; 28	9
2275	2-ETHYLBUTANOL	3	III		1 000	1				2
2276	2-ETHYLHEXYLAMINE	3	III	8	500	2				2
2277	ETHYL METHACRYLATE, STABILIZED	3	II		500	2				2; 20
2278	n-HEPTENE	3	II		500	2				2; 20
2279	HEXACHLOROBUTADIENE	6.1	III		100	10			13; 28	9
2280	HEXAMETHYLENEDIAMINE, SOLID	8	III		200	5		9b		
2281	HEXAMETHYLENE DIISOCYANATE	6.1	II		50	20			13; 28	9; 19
2282	HEXANOLS	3	III		1 000	1				2
2283	ISOBUTYL METHACRYLATE, STABILIZED	3	III		1 000	1				2
2284	ISOBUTYRONITRILE	3	II	6.1	200	5			13; 28	2; 19
2285	ISOCYANATOBENZOTRIFLUORIDES	6.1	II	3	5	200			13; 28	2; 9; 19
2286	PENTAMETHYLHEPTANE	3	III		1 000	1				2
2287	ISOHEPTENE	3	II		500	2				2; 20
2288	ISOHEXENE	3	II		500	2				2; 20
2289	ISOPHORONEDIAMINE	8	III		200	5				
2290	ISOPHORONE DIISOCYANATE	6.1	III		100	10			13; 28	9
2291	LEAD COMPOUND, SOLUBLE, N.O.S.	6.1	III		100	10		9b	13; 28	9
2293	4-METHOXY-4-METHYLPENTAN-2-ONE	3	III		1 000	1				2
2294	N-METHYLANILINE	6.1	III		100	10			13; 28	9
2295	METHYL CHLOROACETATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2296	METHYLCYCLOHEXANE	3	II		500	2				2; 20
2297	METHYLCYCLO- HEXANONE	3	III		1 000	1				2
2298	METHYLCYCLO- PENTANE	3	II		500	2				2; 20
2299	METHYL DICHLORO- ACETATE	6.1	III		100	10			13; 28	9
2300	2-METHYL-5-ETHYL- PYRIDINE	6.1	III		100	10			13; 28	9
2301	2-METHYLFURAN	3	II		500	2				2; 20
2302	5-METHYLHEXAN-2- ONE	3	III		1 000	1				2
2303	ISOPROPENYL BENZENE	3	III		1 000	1				2
2304	NAPHTHALENE, MOLTEN	4.1	III		500	2				
2305	NITROBENZENE- SULFONIC ACID	8	II		50	20	11			
2306	NITROBENZOTRI- FLUORIDES, LIQUID	6.1	II		50	20			13; 28	9; 19
2307	3-NITRO-4-CHLORO- BENZOTRIFLUORIDE	6.1	II		50	20			13; 28	9; 19
2308	NITROSYLSULFURIC ACID, LIQUID	8	II		50	20				
2309	OCTADIENES	3	II		500	2				2; 20
2310	PENTANE-2,4-DIONE	3	III	6.1	500	2			13; 28	2
2311	PHENETIDINES	6.1	III		100	10			13; 28	9
2312	PHENOL, MOLTEN	6.1	II		50	20			13	9; 19
2313	PICOLINES	3	III		1 000	1				2
2315	POLYCHLORINATED BIPHENYLS, LIQUID	9	II		0		1		1; 13; 28	19
2316	SODIUM CUPRO- CYANIDE, SOLID	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2317	SODIUM CUPRO- CYANIDE SOLUTION	6.1	I		5	200			1; 13; 28	9; 17
2318	SODIUM HYDRO- SULFIDE with < 25 % water of crystallization	4.2	II		100	10	1; 12			
2319	TERPENE HYDRO- CARBONS, N.O.S.	3	III		1 000	1				2
2320	TETRAETHYLENE- PENTAMINE	8	III		200	5				
2321	TRICHLOROBENZENES, LIQUID	6.1	III		100	10			13; 28	9
2322	TRICHLOROBUTENE	6.1	II		50	20			13; 28	9; 19
2323	TRIETHYL PHOSPHITE	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2324	TRIISOBUTYLENE	3	III		1 000	1				2
2325	1,3,5-TRIMETHYL-BENZENE	3	III		1 000	1				2
2326	TRIMETHYLCYCLO-HEXYLAMINE	8	III		200	5				
2327	TRIMETHYLHEXA-METHYLENEDIAMINES	8	III		200	5				
2328	TRIMETHYLHEXA-METHYLENE DIISOCYANATE	6.1	III		100	10			13; 28	9
2329	TRIMETHYL PHOSPHITE	3	III		1 000	1				2
2330	UNDECANE	3	III		1 000	1				2
2331	ZINC CHLORIDE, ANHYDROUS	8	III		200	5		9b		
2332	ACETALDEHYDE OXIME	3	III		1 000	1				2
2333	ALLYL ACETATE	3	II	6.1	200	5			13; 28	2; 19
2334	ALLYLAMINE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2335	ALLYL ETHYL ETHER	3	II	6.1	200	5			13; 28	2; 19
2336	ALLYL FORMATE	3	I	6.1	50	20			13; 28	2; 19
2337	PHENYL MERCAPTAN	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2338	BENZOTRIFLUORIDE	3	II		500	2				2; 20
2339	2-BROMOBUTANE	3	II		500	2				2; 20
2340	2-BROMOETHYL ETHYL ETHER	3	II		500	2				2; 20
2341	1-BROMO-3-METHYL-BUTANE	3	III		1 000	1				2
2342	BROMOMETHYL-PROPANES	3	II		500	2				2; 20
2343	2-BROMOPENTANE	3	II		500	2				2; 20
2344	BROMOPROPANES	3	II		500	2				2; 20
		3	III		1 000	1				2
2345	3-BROMOPROPYNE	3	II		500	2				2; 20
2346	BUTANEDIONE	3	II		500	2				2; 20
2347	BUTYL MERCAPTAN	3	II		500	2				2; 20
2348	BUTYL ACRYLATES, STABILIZED	3	III		1 000	1				2
2350	BUTYL METHYL ETHER	3	II		500	2				2; 20
2351	BUTYL NITRITES	3	II		500	2				2; 20
		3	III		1 000	1				2
2352	BUTYL VINYL ETHER, STABILIZED	3	II		500	2				2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2353	BUTYRYL CHLORIDE	3	II	8	200	5				2; 20
2354	CHLOROMETHYL ETHYL ETHER	3	II	6.1	200	5			13; 28	2; 19
2356	2-CHLOROPROPANE	3	I		100	10				2; 20
2357	CYCLOHEXYLAMINE	8	II	3	10	100				2
2358	CYCLOOCTATETRAENE	3	II		500	2				2; 20
2359	DIALLYLAMINE	3	II	6.1 8	200	5			13; 28	2; 19
2360	DIALLYL ETHER	3	II	6.1	200	5			13; 28	2; 19
2361	DIISOBUTYLAMINE	3	III	8	500	2				2
2362	1,1-DICHLOROETHANE	3	II		500	2				2; 20
2363	ETHYL MERCAPTAN	3	I		100	10				2; 20
2364	n-PROPYLBENZENE	3	III		1 000	1				2
2366	DIETHYL CARBONATE	3	III		1 000	1				2
2367	alpha-METHYL-VALERALDEHYDE	3	II		500	2				2; 20
2368	alpha-PINENE	3	III		1 000	1				2
2370	1-HEXENE	3	II		500	2				2; 20
2371	ISOPENTENES	3	I		100	10				2; 20
2372	1,2-DI-(DIMETHYLAMINO) ETHANE	3	II		500	2				2; 20
2373	DIETHOXYMETHANE	3	II		500	2				2; 20
2374	3,3-DIETHOXYPROPENE	3	II		500	2				2; 20
2375	DIETHYL SULFIDE	3	II		500	2				2; 20
2376	2,3-DIHYDROPYRAN	3	II		500	2				2; 20
2377	1,1-DIMETHOXYETHANE	3	II		500	2				2; 20
2378	2-DIMETHYLAMINO-ACETONITRILE	3	II	6.1	200	5			13; 28	2; 19
2379	1,3-DIMETHYLBUTYL-AMINE	3	II	8	200	5				2; 20
2380	DIMETHYLDIETHOXY-SILANE	3	II		500	2				2; 20
2381	DIMETHYL DISULFIDE	3	II		500	2				2; 20
2382	DIMETHYLHYDRAZINE, SYMMETRICAL	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2383	DIPROPYLAMINE	3	II	8	200	5				2; 20
2384	DI-n-PROPYL ETHER	3	II		500	2				2; 20
2385	ETHYL ISOBUTYRATE	3	II		500	2				2; 20
2386	1-ETHYLPIPERIDINE	3	II	8	200	5				2; 20
2387	FLUOROBENZENE	3	II		500	2				2; 20
2388	FLUOROTOLUENES	3	II		500	2				2; 20
2389	FURAN	3	I		100	10				2; 20

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2390	2-IODOBUTANE	3	II		500	2				2; 20
2391	IODOMETHYLPROPANES	3	II		500	2				2; 20
2392	IODOPROPANES	3	III		1 000	1				2
2393	ISOBUTYL FORMATE	3	II		500	2				2; 20
2394	ISOBUTYL PROPIONATE	3	III		1 000	1				2
2395	ISOBUTYRYL CHLORIDE	3	II	8	200	5				2; 20
2396	METHACRYLALDEHYDE, STABILIZED	3	II	6.1	200	5			13; 28	2; 19
2397	3-METHYLBUTAN-2-ONE	3	II		500	2				2; 20
2398	METHYL tert-BUTYL ETHER	3	II		500	2				2; 20
2399	1-METHYLPYPERIDINE	3	II	8	200	5				2; 20
2400	METHYL ISOVALERATE	3	II		500	2				2; 20
2401	PIPERIDINE	8	I	3	5	200				2; 20
2402	PROPANETHIOLS	3	II		500	2				2; 20
2403	ISOPROPENYL ACETATE	3	II		500	2				2; 20
2404	PROPIONITRILE	3	II	6.1	200	5			13; 28	2; 19
2405	ISOPROPYL BUTYRATE	3	III		1 000	1				2
2406	ISOPROPYL ISOBUTYRATE	3	II		500	2				2; 20
2407	ISOPROPYL CHLOROFORMATE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
2409	ISOPROPYL PROPIONATE	3	II		500	2				2; 20
2410	1,2,3,6-TETRAHYDRO-PYRIDINE	3	II		500	2				2; 20
2411	BUTYRONITRILE	3	II	6.1	200	5			13; 28	2; 19
2412	TETRAHYDRO-THIOPHENE	3	II		500	2				2; 20
2413	TETRAPROPYL ORTHO-TITANATE	3	III		1 000	1				2
2414	THIOPHENE	3	II		500	2				2; 20
2416	TRIMETHYL BORATE	3	II		500	2				2; 20
2417	CARBONYL FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2418	SULFUR TETRA-FLUORIDE	2.3		8	10	100			9; 10; 36	7; 17
2419	BROMOTRIFLUORO-ETHYLENE	2.1			100	10			9; 10; 36	2; 20
2420	HEXAFLUOROACETONE	2.3		8	10	100			9; 10; 36	7; 17
2421	NITROGEN TRIOXIDE	2.3	CARRIAGE PROHIBITED							
2422	OCTAFLUOROBUT-2-ENE (REFRIGERANT GAS R 1318)	2.2			500	2			9; 10; 36	
2424	OCTAFLUOROPROPANE (REFRIGERANT GAS R 218)	2.2			500	2			9; 10; 36	
2426	AMMONIUM NITRATE, LIQUID, hot concentrated solution, in a concentration of > 80 % and ≤ 93 %	5.1			200	5				
2427	POTASSIUM CHLORATE, AQUEOUS SOLUTION	5.1	II		50	20	6		24	
		5.1	III		200	5	6		24	
2428	SODIUM CHLORATE, AQUEOUS SOLUTION	5.1	II		50	20			24	
		5.1	III		200	5			24	
2429	CALCIUM CHLORATE, AQUEOUS SOLUTION	5.1	II		50	20			24	
		5.1	III		200	5			24	
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–
2431	ANISIDINES	6.1	III		100	10			13; 28	9
2432	N,N-DIETHYLANILINE	6.1	III		100	10			13; 28	9
2433	CHLORONITRO-TOLUENES, LIQUID	6.1	III		100	10			13; 28	9
2434	DIBENZYL-DICHLORO-SILANE	8	II		50	20				
2435	ETHYLPHENYL-DICHLORO-SILANE	8	II		50	20				
2436	THIOACETIC ACID	3	II		500	2				2; 20
2437	METHYLPHENYL-DICHLORO-SILANE	8	II		50	20				
2438	TRIMETHYLACETYL CHLORIDE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
2439	SODIUM HYDROGEN-DIFLUORIDE	8	II		50	20	11			

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1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2440	STANNIC CHLORIDE PENTAHYDRATE	8	III		200	5		9b		
2441	TITANIUM TRICHLORIDE, PYROPHORIC or TITANIUM TRICHLORIDE MIXTURE, PYROPHORIC	4.2	I	8	0		1			20
2442	TRICHLOROACETYL CHLORIDE	8	II		50	20				
2443	VANADIUM OXY-TRICHLORIDE	8	II		50	20				
2444	VANADIUM TETRACHLORIDE	8	I		20	50				20
2445	LITHIUM ALKYLs, LIQUID	4.2	I	4.3	0		1			20
2446	NITROCRESOLS, SOLID	6.1	III		100	10		9b	13; 28	9
2447	PHOSPHORUS, WHITE, MOLTEN	4.2	I	6.1	0				20	
2448	SULFUR, MOLTEN	4.1	III		500	2				
2451	NITROGEN TRI-FLUORIDE	2.2		5.1	200	5			9; 10; 36	
2452	ETHYLACETYLENE, STABILIZED	2.1			100	10			9; 10; 36	2; 20
2453	ETHYL FLUORIDE (REFRIGERANT GAS R 161)	2.1			100	10			9; 10; 36	2; 20
2454	METHYL FLUORIDE (REFRIGERANT GAS R 41)	2.1			100	10			9; 10; 36	2; 20
2455	METHYL NITRITE	2.2	CARRIAGE PROHIBITED							
2456	2-CHLOROPROPENE	3	I		100	10				2; 20
2457	2,3-DIMETHYLBUTANE	3	II		500	2				2; 20
2458	HEXADIENES	3	II		500	2				2; 20
2459	2-METHYL-1-BUTENE	3	I		100	10				2; 20
2460	2-METHYL-2-BUTENE	3	II		500	2				2; 20
2461	METHYLPENTADIENE	3	II		500	2				2; 20
2463	ALUMINIUM HYDRIDE	4.3	I		0		1		23	20
2464	BERYLLIUM NITRATE	5.1	II	6.1	20	50	11		24; 28	
2465	DICHLOROISO-CYANURIC ACID, DRY or DICHLOROISO-CYANURIC ACID SALTS	5.1	II		50	20			24	
2466	POTASSIUM SUPEROXIDE	5.1	I		20	50	10; 12		24	20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2468	TRICHLOROISO-CYANURIC ACID, DRY	5.1	II		50	20			24	
2469	ZINC BROMATE	5.1	III		200	5		8	24	
2470	PHENYLACETONITRILE, LIQUID	6.1	III		100	10			13; 28	9
2471	OSMIUM TETROXIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2473	SODIUM ARSANILATE	6.1	III		100	10		9b	13; 28	9
2474	THIOPHOSGENE	6.1	II		50	20			13; 28	9; 19
2475	VANADIUM TRICHLORIDE	8	III		200	5		9b		
2477	METHYL ISOTHIO-CYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2478	ISOCYANATES, FLAMMABLE, TOXIC, N.O.S. or ISOCYANATE, SOLUTION, FLAMMABLE, TOXIC, N.O.S.	3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
2480	METHYL ISOCYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2481	ETHYL ISOCYANATE	3	I	6.1	50	20			13; 28	2; 19
2482	n-PROPYL ISOCYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2483	ISOPROPYL ISO-CYANATE	3	I	6.1	50	20			13; 28	2; 19
2484	tert-BUTYL ISOCYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2485	n-BUTYL ISOCYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2486	ISOBUTYL ISOCYANATE	3	II	6.1	200	5			13; 28	2; 19
2487	PHENYL ISOCYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2488	CYCLOHEXYL ISO-CYANATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2490	DICHLOROISOPROPYL ETHER	6.1	II		50	20			13; 28	9; 19
2491	ETHANOLAMINE or ETHANOLAMINE SOLUTION	8	III		200	5				
2493	HEXAMETHYLENIMINE	3	II	8	200	5				2; 20
2495	IODINE PENTAFLUORIDE	5.1	I	6.1 8	0				24; 28	20
2496	PROPIONIC ANHYDRIDE	8	III		200	5				
2498	1,2,3,6-TETRAHYDRO-BENZALDEHYDE	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2501	TRIS-(1-AZIRIDINYL) PHOSPHINE OXIDE SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2502	VALERYL CHLORIDE	8	II	3	10	100				2
2503	ZIRCONIUM TETRA-CHLORIDE	8	III		200	5		9b		
2504	TETRABROMOETHANE	6.1	III		100	10			13; 28	9
2505	AMMONIUM FLUORIDE	6.1	III		100	10		9b	13; 28	9
2506	AMMONIUM HYDROGEN SULFATE	8	II		50	20	11	9a		
2507	CHLOROPLATINIC ACID, SOLID	8	III		200	5		9b		
2508	MOLYBDENUM PENTA-CHLORIDE	8	III		200	5		9b		
2509	POTASSIUM HYDROGEN SULFATE	8	II		50	20	11	9a		
2511	2-CHLOROPROPIONIC ACID	8	III		200	5				
2512	AMINOPHENOLS (o-, m-, p-)	6.1	III		100	10		9b	13; 28	9
2513	BROMOACETYL BROMIDE	8	II		50	20				
2514	BROMOBENZENE	3	III		1 000	1				2
2515	BROMOFORM	6.1	III		100	10			13; 28	9
2516	CARBON TETRA-BROMIDE	6.1	III		100	10		9b	13; 28	9
2517	1-CHLORO-1,1-DI-FLUOROETHANE (REFRIGERANT GAS R 142b)	2.1			100	10			9; 10; 36	2; 20
2518	1,5,9-CYCLODODECA-TRIENE	6.1	III		100	10			13; 28	9
2520	CYCLOOCTADIENES	3	III		1 000	1				2
2521	DIKETENE, STABILIZED	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2522	2-DIMETHYLAMINO-ETHYL METHACRYLATE	6.1	II		50	20			13; 28	9; 19
2524	ETHYL ORTHO-FORMATE	3	III		1 000	1				2
2525	ETHYL OXALATE	6.1	III		100	10			13; 28	9
2526	FURFURYLAMINE	3	III	8	500	2				2
2527	ISOBUTYL ACRYLATE, STABILIZED	3	III		1 000	1				2
2528	ISOBUTYL ISO-BUTYRATE	3	III		1 000	1				2
2529	ISOBUTYRIC ACID	3	III	8	500	2				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2531	METHACRYLIC ACID, STABILIZED	8	II		50	20				
2533	METHYL TRICHLORO-ACETATE	6.1	III		100	10			13; 28	9
2534	METHYLCHLOROSILANE	2.3		2.1 8	10	100			9; 10; 36	2; 7; 17
2535	4-METHYLMORPHOLINE (N-METHYL-MORPHOLINE)	3	II	8	200	5				2; 20
2536	METHYL TETRA-HYDROFURAN	3	II		500	2				2; 20
2538	NITRONAPHTHALENE	4.1	III		500	2		1		
2541	TERPINOLENE	3	III		1 000	1				2
2542	TRIBUTYLAMINE	6.1	II		50	20			13; 28	9; 19
2545	HAFNIUM POWDER, DRY	4.2	I		0	-	1	-		20
		4.2	II		100	10	1; 12	-		-
		4.2	III		200	5	1	4		-
2546	TITANIUM POWDER, DRY	4.2	I		0	-	1	-		20
		4.2	II		100	10	1; 12	-		-
		4.2	III		200	5	1	4		-
2547	SODIUM SUPEROXIDE	5.1	I		20	50	10; 12		24	20
2548	CHLORINE PENTA-FLUORIDE	2.3		5.1 8	10	100			9; 10; 36	7; 17
2552	HEXAFLUOROACETONE HYDRATE, LIQUID	6.1	II		50	20			13; 28	9; 19
2554	METHYLALYL CHLORIDE	3	II		500	2				2; 20
2555	NITROCELLULOSE WITH WATER with ≥ 25 % water, by mass	4.1	II		50	20				17
2556	NITROCELLULOSE WITH ALCOHOL with ≥ 25 % alcohol, by mass, and $\leq 12,6$ % nitrogen, by dry mass	4.1	II		50	20				17
2557	NITROCELLULOSE, with $\leq 12,6$ % nitrogen, by dry mass, MIXTURE WITH or WITHOUT PLASTICIZER, WITH or WITHOUT PIGMENT	4.1	II		50	20				17
2558	EPIBROMOHYDRIN	6.1	I	3	5	200			1; 13; 28	2; 9; 17

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2560	2-METHYLPENTAN-2-OL	3	III		1 000	1				2
2561	3-METHYL-1-BUTENE	3	I		100	10				2; 20
2564	TRICHLOROACETIC ACID SOLUTION	8	II		50	20				
		8	III		200	5				
2565	DICYCLOHEXYLAMINE	8	III		200	5				
2567	SODIUM PENTA-CHLOROPHENATE	6.1	II		50	20	11		13; 28	9; 19
2570	CADMIUM COMPOUND	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2571	ALKYLSULFURIC ACIDS	8	II		50	20				
2572	PHENYLHYDRAZINE	6.1	II		50	20			13; 28	9; 19
2573	THALLIUM CHLORATE	5.1	II	6.1	20	50	11; 12		24; 28	
2574	TRICRESYL PHOSPHATE with > 3 % ortho isomer	6.1	II		50	20			13; 28	9; 19
2576	PHOSPHORUS OXY-BROMIDE, MOLTEN	8	II		50	20				
2577	PHENYLACETYL CHLORIDE	8	II		50	20				
2578	PHOSPHORUS TRIOXIDE	8	III		200	5		9b		
2579	PIPERAZINE	8	III		200	5		9b		
2580	ALUMINIUM BROMIDE SOLUTION	8	III		200	5				
2581	ALUMINIUM CHLORIDE SOLUTION	8	III		200	5				
2582	FERRIC CHLORIDE SOLUTION	8	III		200	5				
2583	ALKYLSULFONIC ACIDS, SOLID or ARYL-SULFONIC ACIDS, SOLID with > 5 % free sulfuric acid	8	II		50	20	11			
2584	ALKYLSULFONIC ACIDS, LIQUID or ARYLSULFONIC ACIDS, LIQUID with > 5 % free sulfuric acid	8	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2585	ALKYLSULFONIC ACIDS, SOLID or ARYL-SULFONIC ACIDS, SOLID with ≤ 5 % free sulfuric acid	8	III		200	5		9b		
2586	ALKYLSULFONIC ACIDS, LIQUID or ARYLSUL-FONIC ACIDS, LIQUID with ≤ 5 % free sulfuric acid	8	III		200	5				
2587	BENZOQUINONE	6.1	II		50	20	11		13; 28	9; 19
2588	PESTICIDE, SOLID, TOXIC, N.O.S.	6.1	I		5	200	-	-	1; 13; 28	9; 17
		6.1	II		50	20	11	-	13; 28	9; 19
		6.1	III		100	10	-	9b	13; 28	9
2589	VINYL CHLOROACETATE	6.1	II	3	5	200			13; 28	2; 9; 19
2590	WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)	9	III		20	50	1		13; 28	
2591	XENON, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
2599	CHLOROTRIFLUOROMETHANE AND TRI-FLUOROMETHANE AZEOTROPIC MIXTURE with ca 60 % chlorotrifluoro-methane (REFRIGERANT GAS R 503)	2.2			500	2			9; 10; 36	
2600	CARBON MONOXIDE AND HYDROGEN MIXTURE, COMPRESSED	2.3		2.1	10	100			9; 10; 36	2; 7; 17
2601	CYCLOBUTANE	2.1			100	10			9; 10; 36	2; 20
2602	DICHLORODIFLUOROMETHANE AND 1,1-DIFLUOROETHANE AZEOTROPIC MIXTURE with ca 74 % dichlorodifluoromethane (REFRIGERANT GAS R 500)	2.2			500	2			9; 10; 36	
2603	CYCLOHEPTATRIENE	3	II	6.1	200	5			13; 28	2; 19
2604	BORON TRIFLUORIDE DIETHYL ETHERATE	8	I	3	5	200				2; 20

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2605	METHOXYMETHYL ISOCYANATE	3	I	6.1	50	20			13; 28	2; 19
2606	METHYL ORTHO-SILICATE	6.1	I	3	5	200			1; 13; 28	2; 9; 17
2607	ACROLEIN DIMER, STABILIZED	3	III		1 000	1				2
2608	NITROPROPANES	3	III		1 000	1				2
2609	TRIALLYL BORATE	6.1	III		100	10			13; 28	9
2610	TRIALLYLAMINE	3	III	8	500	2				2
2611	PROPYLENE CHLORO-HYDRIN	6.1	II	3	5	200			13; 28	2; 9; 19
2612	METHYL PROPYL ETHER	3	II		500	2				2; 20
2614	METHALLYL ALCOHOL	3	III		1 000	1				2
2615	ETHYL PROPYL ETHER	3	II		500	2				2; 20
2616	TRIISOPROPYL BORATE	3	II		500	2				2; 20
		3	III		1 000	1				2
2617	METHYLCYCLO-HEXANOLS, flammable	3	III		1 000	1				2
2618	VINYLTOLUENES, STABILIZED	3	III		1 000	1				2
2619	BENZYLDIMETHYLAMINE	8	II	3	10	100				2
2620	AMYL BUTYRATES	3	III		1 000	1				2
2621	ACETYL METHYL CARBINOL	3	III		1 000	1				2
2622	GLYCIDALDEHYDE	3	II	6.1	200	5			13; 28	2; 19
2623	FIRELIGHTERS, SOLID with flammable liquid	4.1	III		500	2				
2624	MAGNESIUM SILICIDE	4.3	II		100	10	1; 12		23	
2626	CHLORIC ACID, AQUEOUS SOLUTION with ≤ 10 % chloric acid	5.1	II		50	20			24	
2627	NITRITES, INORGANIC, N.O.S.	5.1	II		50	20			24	
2628	POTASSIUM FLUORO-ACETATE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2629	SODIUM FLUORO-ACETATE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2630	SELENATES and SELENITES	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2642	FLUOROACETIC ACID	6.1	I		5	200	10; 12		1; 13; 28	9; 17
2643	METHYL BROMO-ACETATE	6.1	II		50	20			13; 28	9; 19
2644	METHYL IODIDE	6.1	I		5	200			1; 13; 28	9; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2645	PHENACYL BROMIDE	6.1	II		50	20	11		13; 28	9; 19
2646	HEXACHLOROCYCLO-PENTADIENE	6.1	I		5	200			1; 13; 28	9; 17
2647	MALONONITRILE	6.1	II		50	20	11		13; 28	9; 19
2648	1,2-DIBROMOBUTAN-3-ONE	6.1	II		50	20			13; 28	9; 19
2649	1,3-DICHLOROACETONE	6.1	II		50	20	11		13; 28	9; 19
2650	1,1-DICHLORO-1-NITRO-ETHANE	6.1	II		50	20			13; 28	9; 19
2651	4,4'-DIAMINODIPHENYL-METHANE	6.1	III		100	10		9b	13; 28	9
2653	BENZYL IODIDE	6.1	II		50	20			13; 28	9; 19
2655	POTASSIUM FLUORO-SILICATE	6.1	III		100	10		9b	13; 28	9
2656	QUINOLINE	6.1	III		100	10			13; 28	9
2657	SELENIUM DISULFIDE	6.1	II		50	20	11		13; 28	9; 19
2659	SODIUM CHLORO-ACETATE	6.1	III		100	10		9b	13; 28	9
2660	NITROTOLUIDINES (MONO)	6.1	III		100	10		9b	13; 28	9
2661	HEXACHLOROACETONE	6.1	III		100	10			13; 28	9
2662	HYDROQUINONE, SOLID	6.1	III		100	10		9b	13; 28	9
2664	DIBROMOMETHANE	6.1	III		100	10			13; 28	9
2667	BUTYLTOLUENES	6.1	III		100	10			13; 28	9
2668	CHLOROACETONITRILE	6.1	II	3	5	200			13; 28	2; 9; 19
2669	CHLOROCRESOLS, SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2670	CYANURIC CHLORIDE	8	II		50	20	11			
2671	AMINOPYRIDINES (o-, m-, p-)	6.1	II		50	20	11		13; 28	9; 19
2672	AMMONIA SOLUTION, relative density $\geq 0,880 \leq 0,957$ at 15 °C in water, with $> 10 \% \leq 35 \%$ ammonia	8	III		200	5				
2673	2-AMINO-4-CHLORO-PHENOL	6.1	II		50	20	11		13; 28	9; 19
2674	SODIUM FLUORO-SILICATE	6.1	III		100	10		9b	13; 28	9
2676	STIBINE	2.3		2.1	10	100			9; 10; 36	2; 7; 17

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2677	RUBIDIUM HYDROXIDE SOLUTION	8	II		50	20				
		8	III		200	5				
2678	RUBIDIUM HYDROXIDE	8	II		50	20	11			
2679	LITHIUM HYDROXIDE SOLUTION	8	II		50	20				
		8	III		200	5				
2680	LITHIUM HYDROXIDE	8	II		50	20	11			
2681	CAESIUM HYDROXIDE SOLUTION	8	II		50	20				
		8	III		200	5				
2682	CAESIUM HYDROXIDE	8	II		50	20	11			
2683	AMMONIUM SULFIDE SOLUTION	8	II	3 6.1	10	100			13; 28	2
2684	3-DIETHYLAMINO-PROPYLAMINE	3	III	8	500	2				2
2685	N,N-DIETHYLETHYLENE-DIAMINE	8	II	3	10	100				2
2686	2-DIETHYLAMINO-ETHANOL	8	II	3	10	100				2
2687	DICYCLOHEXYL-AMMONIUM NITRITE	4.1	III		500	2		1		
2688	1-BROMO-3-CHLORO-PROPANE	6.1	III		100	10			13; 28	9
2689	GLYCEROL alpha-MONO-CHLOROHYDRIN	6.1	III		100	10			13; 28	9
2690	N,n-BUTYLIMIDAZOLE	6.1	II		50	20			13; 28	9; 19
2691	PHOSPHORUS PENTA-BROMIDE	8	II		50	20	11			
2692	BORON TRIBROMIDE	8	I		20	50				20
2693	BISULFITES, AQUEOUS SOLUTION, N.O.S.	8	III		200	5				
2698	TETRAHYDROPHTHALIC ANHYDRIDES with > 0,05 % of maleic anhydride	8	III		200	5		9b		
2699	TRIFLUOROACETIC ACID	8	I		20	50				20
2705	1-PENTOL	8	II		50	20				
2707	DIMETHYLDIOXANES	3	II		500	2				2; 20
		3	III		1 000	1				2
2709	BUTYLBENZENES	3	III		1 000	1				2
2710	DIPROPYL KETONE	3	III		1 000	1				2
2713	ACRIDINE	6.1	III		100	10		9b	13; 28	9
2714	ZINC RESINATE	4.1	III		500	2	12	1		

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2715	ALUMINIUM RESINATE	4.1	III		500	2	12	1		
2716	1,4-BUTYNE DIOL	6.1	III		100	10		9b	13; 28	9
2717	CAMPHOR, synthetic	4.1	III		500	2		1		
2719	BARIUM BROMATE	5.1	II	6.1	20	50	11		24; 28	
2720	CHROMIUM NITRATE	5.1	III		200	5		8	24	
2721	COPPER CHLORATE	5.1	II		50	20	11	8	24	
2722	LITHIUM NITRATE	5.1	III		200	5		8	24	
2723	MAGNESIUM CHLORATE	5.1	II		50	20	11	8	24	
2724	MANGANESE NITRATE	5.1	III		200	5		8	24	
2725	NICKEL NITRATE	5.1	III		200	5		8	24	
2726	NICKEL NITRITE	5.1	III		200	5		8	24	
2727	THALLIUM NITRATE	6.1	II	5.1	5	200	11; 12		13; 28	9; 19
2728	ZIRCONIUM NITRATE	5.1	III		200	5		8	24	
2729	HEXACHLOROBENZENE	6.1	III		100	10		9b	13; 28	9
2730	NITROANISOLE, LIQUID	6.1	III		100	10			13; 28	9
2732	NITROBROMO-BENZENES, LIQUID	6.1	III		100	10			13; 28	9
2733	AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLY AMINES, FLAMMABLE, CORROSIVE, N.O.S.	3	I	8	50	20				2; 20
		3	II	8	200	5				2; 20
		3	III	8	500	2				2
2734	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.	8	I	3	5	200				2; 20
		8	II	3	10	100				2
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	I		20	50				20
		8	II		50	20				-
		8	III		200	5				-
2738	N-BUTYLANILINE	6.1	II		50	20			13; 28	9; 19
2739	BUTYRIC ANHYDRIDE	8	III		200	5				
2740	n-PROPYL CHLORO-FORMATE	6.1	I	3 8	5	200			1; 13; 28	2; 9; 17
2741	BARIUM HYPOCHLORITE with > 22 % available chlorine	5.1	II	6.1	20	50	11		24; 28	
2742	CHLOROFORMATES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	II	3 8	5	200			13; 28	2; 9; 19

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2743	n-BUTYL CHLORO-FORMATE	6.1	II	3 8	5	200			13; 28	2; 9; 19
2744	CYCLOBUTYL CHLORO-FORMATE	6.1	II	3 8	5	200			13; 28	2; 9; 19
2745	CHLOROMETHYL CHLOROFORMATE	6.1	II	8	5	200			13; 28	9; 19
2746	PHENYL CHLORO-FORMATE	6.1	II	8	5	200			13; 28	9; 19
2747	tert-BUTYLCYCLOHEXYL CHLOROFORMATE	6.1	III		100	10			13; 28	9
2748	2-ETHYLHEXYL CHLOROFORMATE	6.1	II	8	5	200			13; 28	9; 19
2749	TETRAMETHYLSILANE	3	I		100	10				2; 20
2750	1,3-DICHLORO-PROPANOL-2	6.1	II		50	20			13; 28	9; 19
2751	DIETHYLTHIOPHOS-PHORYL CHLORIDE	8	II		50	20				
2752	1,2-EPOXY-3-ETHOXY-PROPANE	3	III		1 000	1				2
2753	N-ETHYLBENZYL-TOLUIDINES, LIQUID	6.1	III		100	10			13; 28	9
2754	N-ETHYLTOLUIDINES	6.1	II		50	20			13; 28	9; 19
2757	CARBAMATE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2758	CARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 18	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2759	ARSENICAL PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2760	ARSENICAL PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2761	ORGANOCHLORINE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2762	ORGANOCHLORINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2763	TRIAZINE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2764	TRIAZINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2771	THIOCARBAMATE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2772	THIOCARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2775	COPPER BASED PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2776	COPPER BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2777	MERCURY BASED PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2778	MERCURY BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2779	SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2780	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2781	BIPYRIDILIUM PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2782	BIPYRIDILIUM PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2783	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2784	ORGANOPHOSPHORUS PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2785	4-THIAPENTANAL	6.1	III		100	10			13; 28	9
2786	ORGANOTIN PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
2787	ORGANOTIN PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
2788	ORGANOTIN COMPOUND, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2789	ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, > 80 % ACID, by mass	8	II	3	10	100				2
2790	ACETIC ACID, SOLUTION, ≥ 50 % ≤ 80 % acid, by mass	8	II		50	20				
	ACETIC ACID, SOLUTION, > 10 % < 50 % acid, by mass	8	III		200	5				
2793	FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS in a form liable to self-heating	4.2	III		200	5	1	4		
2794	BATTERIES, WET, FILLED WITH ACID, electric storage	8			200	5		14		
2795	BATTERIES, WET, FILLED WITH ALKALI, electric storage	8			200	5		14		
2796	SULFURIC ACID with ≤ 51 % acid or BATTERY FLUID, ACID	8	II		50	20				
2797	BATTERY FLUID, ALKALI	8	II		50	20				
2798	PHENYLPHOSPHORUS DICHLORIDE	8	II		50	20				
2799	PHENYLPHOSPHORUS THIODICHLORIDE	8	II		50	20				
2800	BATTERIES, WET, NON-SPILLABLE, electric storage	8			200	5			14	
2801	DYE, LIQUID, CORROSIVE, N.O.S. or DYE, INTERMEDIATE, LIQUID, CORROSIVE, N.O.S	8	I		20	50				20
		8	II		50	20				-
		8	III		200	5				-
2802	COPPER CHLORIDE	8	III		200	5		9b		
2803	GALLIUM	8	III		200	5		9b		
2806	LITHIUM NITRIDE	4.3	I		0		1		23	20
2807	Magnetized material	9	III	Non-dangerous for road transport						
2809	MERCURY	8	III		200	5				
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	I		5	200	-	-	1; 13; 28	9; 17
		6.1	II		50	20	11	-	13; 28	9; 19
		6.1	III		100	10	-	9b	13; 28	9
2812	Sodium aluminate, solid	8	III	Non-dangerous for road transport						
2813	WATER-REACTIVE SOLID, N.O.S.	4.3	I		0	-	1	-	23	20
		4.3	II		100	10	1; 12	-	23	-
		4.3	III		500	2	1	5	23	-
2814	INFECTIOUS SUBSTANCE, AFFECTING HUMANS	6.2	II		0				13; 25; 26; 28	3; 9; 15
2815	N-AMINOETHYL-PIPERAZINE	8	III		200	5				
2817	AMMONIUM HYDROGEN-DIFLUORIDE SOLUTION	8	II	6.1	10	100			13; 28	
		8	III	6.1	50	20			13; 28	
2818	AMMONIUM POLY-SULFIDE SOLUTION	8	II	6.1	10	100			13; 28	
		8	III	6.1	50	20			13; 28	
2819	AMYL ACID PHOSPHATE	8	III		200	5				
2820	BUTYRIC ACID	8	III		200	5				
2821	PHENOL SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2822	2-CHLOROPYRIDINE	6.1	II		50	20			13; 28	9; 19
2823	CROTONIC ACID	8	III		200	5		9b		
2826	ETHYL CHLOROTHIO-FORMATE	8	II	3	10	100				2
2829	CAPROIC ACID	8	III		200	5				
2830	LITHIUM FERROSILICON	4.3	II		100	10	1; 12		23	
2831	1,1,1-TRICHLORO-ETHANE	6.1	III		100	10			13; 28	9
2834	PHOSPHOROUS ACID	8	III		200	5		9b		
2835	SODIUM ALUMINIUM HYDRIDE	4.3	II		100	10	1		23	
2837	BISULFATES, AQUEOUS SOLUTION	8	II		50	20				
		8	III		200	5				
2838	VINYL BUTYRATE, STABILIZED	3	II		500	2				2; 20
2839	ALDOL	6.1	II		50	20			13; 28	9; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2840	BUTYRALDOXIME	3	III		1 000	1				2
2841	DI-n-AMYLAMINE	3	III	6.1	500	2			13; 28	2
2842	NITROETHANE	3	III		1 000	1				2
2844	CALCIUM MANGANESE SILICON	4.3	III		500	2	1	5; 7	23	
2845	PYROPHORIC LIQUID, ORGANIC, N.O.S.	4.2	I		0		1			20
2846	PYROPHORIC SOLID, ORGANIC, N.O.S.	4.2	I		0		1			20
2849	3-CHLOROPROPANOL-1	6.1	III		100	10			13; 28	9
2850	PROPYLENE TETRAMER	3	III		1 000	1				2
2851	BORON TRIFLUORIDE DIHYDRATE	8	II		50	20				
2852	DIPICRYL SULFIDE, WETTED with ≥ 10 % water, by mass	4.1	I		0					17
2853	MAGNESIUM FLUORO-SILICATE	6.1	III		100	10		9b	13; 28	9
2854	AMMONIUM FLUORO-SILICATE	6.1	III		100	10		9b	13; 28	9
2855	ZINC FLUOROSILICATE	6.1	III		100	10		9b	13; 28	9
2856	FLUOROSILICATES, N.O.S.	6.1	III		100	10		9b	13; 28	9
2857	REFRIGERATING MACHINES containing non-flammable, non-toxic gases or ammonia solutions (UN 2672)	2.2			500	2			9	
2858	ZIRCONIUM, DRY, coiled wire, finished metal sheets, strip (thinner than 254 μ but not thinner than 18 μ)	4.1	III		500	2		1		
2859	AMMONIUM META-VANADATE	6.1	II		50	20	11		13; 28	9; 19
2861	AMMONIUM POLY-VANADATE	6.1	II		50	20	11		13; 28	9; 19
2862	VANADIUM PENTOXIDE, non-fused form	6.1	III		100	10		9b	13; 28	9
2863	SODIUM AMMONIUM VANADATE	6.1	II		50	20	11		13; 28	9; 19
2864	POTASSIUM META-VANADATE	6.1	II		50	20	11		13; 28	9; 19
2865	HYDROXYLAMINE SULFATE	8	III		200	5		9b		

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2869	TITANIUM TRICHLORIDE MIXTURE	8	II		50	20	11	–		
		8	III		200	5	–	9b		
2870	ALUMINIUM BORO-HYDRIDE	4.2	I	4.3	0		1			20
	ALUMINIUM BORO-HYDRIDE IN DEVICES	4.2	I	4.3	0		1			20
2871	ANTIMONY POWDER	6.1	III		100	10		9b	13; 28	9
2872	DIBROMOCHLORO-PROPANES	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2873	DIBUTYLAMINO-ETHANOL	6.1	III		100	10			13; 28	9
2874	FURFURYL ALCOHOL	6.1	III		100	10			13; 28	9
2875	HEXACHLOROPHENE	6.1	III		100	10		9b	13; 28	9
2876	RESORCINOL	6.1	III		100	10		9b	13; 28	9
2878	TITANIUM SPONGE POWDERS or TITANIUM SPONGE GRANULES	4.1	III		500	2		1		
2879	SELENIUM OXY-CHLORIDE	8	I	6.1	5	200			13; 28	20
2880	CALCIUM HYPOCHLORITE, HYDRATED, or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with $\geq 5,5\% \leq 16\%$ water	5.1	II		50	20	11	–	24; 35	
		5.1	III		100	10	–	8	24; 35	
2881	METAL CATALYST, DRY	4.2	I		0	–	1	–		20
		4.2	II		100	10	1; 12	–		–
		4.2	III		200	5	1	4		–
2900	INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only	6.2			0				13; 25; 26; 28	3; 9; 15
2902	PESTICIDE, LIQUID, TOXIC, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2903	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S., flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	
		6.1	III	3	50	20			13; 28	2; 9; 19
										2; 9
2904	CHLOROPHENOLATES, LIQUID or PHENOLATES, LIQUID	8	III		200	5				
2905	CHLOROPHENOLATES, SOLID or PHENOLATES, SOLID	8	III		200	5		9b		
2907	ISOSORBIDE DINITRATE MIXTURE with ≥ 60 % lactose, mannose, starch or calcium hydrogen phosphate	4.1	II		50	20	11; 12			17
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	8	I	3	5	200				2; 20
		8	II	3	10	100				2
2921	CORROSIVE SOLID, FLAMMABLE, N.O.S.	8	I	4.1	5	200	–			20
		8	II	4.1	10	100	11			–
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	I	6.1	5	200			13; 28	20
		8	II	6.1	10	100			13; 28	–
		8	III	6.1	50	20			13; 28	–
2923	CORROSIVE SOLID, TOXIC, N.O.S.	8	I	6.1	5	200	–	–	13; 28	20
		8	II	6.1	10	100	11	–	13; 28	–
		8	III	6.1	50	20	–	9b	13; 28	–
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	I	8	5	200				2; 20
		3	II	8	10	100				2; 20
		3	III	8	50	20				2
2925	FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.	4.1	II	8	10	100	11; 12			
		4.1	III	8	20	50	12			
2926	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.	4.1	II	6.1	10	100	11; 12		28	
		4.1	III	6.1	20	50	12		28	

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2927	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	6.1	I	8	5	200			1; 13; 28	9; 17
		6.1	II	8	5	200			13; 28	9; 19
2928	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.	6.1	I	8	5	200	-		1; 13; 28	9; 17
		6.1	II	8	5	200	11; 12		13; 28	9; 19
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
2930	TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.	6.1	I	4.1	5	200	-		1; 13; 28	9; 17
		6.1	II	4.1	5	200	11		13; 28	9; 19
2931	VANADYL SULFATE	6.1	II		50	20	11		13; 28	9; 19
2933	METHYL-2-CHLORO-PROPIONATE	3	III		1 000	1				2
2934	ISOPROPYL 2-CHLORO-PROPIONATE	3	III		1 000	1				2
2935	ETHYL-2-CHLORO-PROPIONATE	3	III		1 000	1				2
2936	THIOLACTIC ACID	6.1	II		50	20			13; 28	9; 19
2937	alpha-METHYLBENZYL ALCOHOL, LIQUID	6.1	III		100	10			13; 28	9
2940	9-PHOSPHABICYCLO-NONANES (CYCLO-OCTADIENE PHOSPHINES)	4.2	II		100	10	1; 12			
2941	FLUOROANILINES	6.1	III		100	10			13; 28	9
2942	2-TRIFLUOROMETHYL-ANILINE	6.1	III		100	10			13; 28	9
2943	TETRAHYDRO-FURFURYLAMINE	3	III		1 000	1				2
2945	N-METHYLBUTYLAMINE	3	II	8	200	5				2; 20
2946	2-AMINO-5-DIETHYL-AMINOPENTANE	6.1	III		100	10			13; 28	9
2947	ISOPROPYL CHLORO-ACETATE	3	III		1 000	1				2
2948	3-TRIFLUOROMETHYL-ANILINE	6.1	II		50	20			13; 28	9; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2949	SODIUM HYDRO-SULFIDE with ≥ 25 % water of crystallization	8	II		50	20	11			
2950	MAGNESIUM GRANULES, COATED, particle size ≥ 149 μ	4.3	III		500	2	1	5	23	
2956	5-tert-BUTYL-2,4,6-TRI-NITRO-m-XYLENE (MUSK XYLENE)	4.1	III		500	2			14	14
2965	BORON TRIFLUORIDE DIMETHYL ETHERATE	4.3	I	3 8	0		1		23	2; 20
2966	THIOGLYCOL	6.1	II		50	20			13; 28	9; 19
2967	SULFAMIC ACID	8	III		200	5		9b		
2968	MANEB, STABILIZED or MANEB PREPARATION, STABILIZED against self-heating	4.3	III		500	2	1	5	23	
2969	CASTOR BEANS or CASTOR POMACE or CASTOR FLAKE or CASTOR MEAL	9	II		1 000	1		3		
2983	ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE, with ≤ 30 % ethylene oxide	3	I	6.1	50	20			13; 28	2; 19
2984	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with ≥ 8 % and < 20 % hydrogen peroxide (stabilized as necessary)	5.1	III		200	5			24	
2985	CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.	3	II	8	200	5				2; 20
2986	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.	8	II	3	10	100				2
2987	CHLOROSILANES, CORROSIVE, N.O.S.	8	II		50	20				
2988	CHLOROSILANES, WATER-REACTIVE, FLAMMABLE, CORROSIVE, N.O.S.	4.3	I	3 8	0		1		23	2; 20
2989	LEAD PHOSPHITE, DIBASIC	4.1 4.1	II III		50 500	20 2	11 -	- 1		

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2990	LIFE-SAVING APPLIANCES, SELF-INFLATING	9			1 000	1				
2991	CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200	–		1; 13; 28	2; 9; 17
		6.1	II	3	5	200	–		13; 28	2; 9; 19
		6.1	III	3	50	20	–		13; 28	2; 9
2992	CARBAMATE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2993	ARSENICAL PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
2994	ARSENICAL PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
2995	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
2996	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
2997	TRIAZINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	
		6.1	III	3	50	20			13; 28	2; 9; 19
2998	TRIAZINE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3005	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3006	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3009	COPPER BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3010	COPPER BASED PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3011	MERCURY BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3012	MERCURY BASED PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3013	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3014	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3015	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3016	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3017	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3018	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3019	ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3020	ORGANOTIN PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3021	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
3022	1,2-BUTYLENE OXIDE, STABILIZED	3	II		500	2				2; 20
3023	2-METHYL-2-HEPTANE-THIOL	6.1	I	3	5	200			1; 13; 28	2; 9; 17
3024	COUMARIN DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
3025	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3026	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3027	COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3028	BATTERIES, DRY, CONTAINING POTASSIUM HYDROXIDE SOLID, electric storage	8			200	5		14		
3048	ALUMINIUM PHOSPHIDE PESTICIDE	6.1	I		5	200	10; 12		1; 13; 28	9; 17
3051	ALUMINIUM ALKYL	4.2	I	4.3	0		1			20
3052	ALUMINIUM ALKYL HALIDES, LIQUID	4.2	I	4.3	0		1			20
3053	MAGNESIUM ALKYL	4.2	I	4.3	0		1			20
3054	CYCLOHEXYL MERCAPTAN	3	III		1 000	1				2
3055	2-(2-AMINOETHOXY)-ETHANOL	8	III		200	5				
3056	n-HEPTALDEHYDE	3	III		1 000	1				2

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3057	TRIFLUOROACETYL CHLORIDE	2.3		8	10	100			9; 10; 36	7; 17
3064	NITROGLYCERIN, SOLUTION IN ALCOHOL with > 1 % ≤ 5 % nitroglycerin	3	II		500	2				2; 19
3065	ALCOHOLIC BEVERAGES, with > 70 % alcohol by volume	3	II		500	2				2; 20
	ALCOHOLIC BEVERAGES, with > 24 % ≤ 70 % alcohol by volume	3	III		1 000	1				2
3066	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)	8	II		50	20				
		8	III		200	5				
3070	ETHYLENE OXIDE AND DICHLORODIFLUOROMETHANE MIXTURE with ≤ 12,5 % ethylene oxide	2.2			500	2			9; 10; 36	
3071	MERCAPTANS, LIQUID, TOXIC, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, TOXIC, FLAMMABLE, N.O.S.	6.1	II	3	5	200			13; 28	2; 9; 19
3072	LIFE-SAVING APPLIANCES NOT SELF-INFLATING containing dangerous goods as equipment	9			1 000	1				
3073	VINYLPYRIDINES, STABILIZED	6.1	II	3 8	5	200			13; 28	2; 9; 19
3076	ALUMINIUM ALKYL HYDRIDES	4.2	I	4.3	0		1			20
3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	9	III		1 000	1	13	3	13	
3078	CERIUM, turnings or gritty powder	4.3	II		100	10	1; 12		23	
3079	METHACRYLONITRILE, STABILIZED	3	I	6.1	50	20			13; 28	2; 19

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3080	ISOCYANATES, TOXIC, FLAMMABLE, N.O.S. or ISOCYANATE, SOLUTION, TOXIC, FLAMMABLE, N.O.S.	6.1	II	3	5	200			13; 28	2; 9; 19
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III		1 000	1			13	
3083	PERCHLORYL FLUORIDE	2.3		5.1	10	100			9; 10; 36	7; 17
3084	CORROSIVE SOLID, OXIDIZING, N.O.S.	8	I	5.1	5	200	–		24	20
		8	II	5.1	10	100	11; 12		24	–
3085	OXIDIZING SOLID, CORROSIVE, N.O.S.	5.1	I	8	0	–	–		24	20
		5.1	II	8	20	50	11; 12		24	–
		5.1	III	8	100	10	–		24	–
3086	TOXIC SOLID, OXIDIZING, N.O.S.	6.1	I	5.1	5	200	–		1; 13; 28	9; 17
		6.1	II	5.1	5	200	11; 12		13; 28	9; 19
3087	OXIDIZING SOLID, TOXIC, N.O.S.	5.1	I	6.1	0	–	–		24; 28	20
		5.1	II	6.1	20	50	11; 12		24; 28	–
		5.1	III	6.1	100	10	–		24; 28	–
3088	SELF-HEATING SOLID, ORGANIC, N.O.S.	4.2	II		100	10	1; 12			
		4.2	III		200	5	1			
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1	II		50	20	11	–		
		4.1	III		500	2	12	1		
3090	LITHIUM METAL BATTERIES (including lithium alloy batteries)	9	II		20	50				
3091	LITHIUM METAL BATTERIES CONTAINED IN EQUIP-MENT or LITHIUM BATTERIES PACKED WITH EQUIPMENT (including lithium alloy batteries)	9	II		20	50				
3092	1-METHOXY-2-PROPANOL	3	III		1 000	1				2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3093	CORROSIVE LIQUID, OXIDIZING, N.O.S.	8	I	5.1	5	200			24	20
		8	II	5.1	10	100			24	–
3094	CORROSIVE LIQUID, WATER-REACTIVE, N.O.S.	8	I	4.3	5	200				20
		8	II	4.3	10	100				–
3095	CORROSIVE SOLID, SELF-HEATING, N.O.S.	8	I	4.2	5	200	–			20
		8	II	4.2	10	100	11; 12			–
3096	CORROSIVE SOLID, WATER-REACTIVE, N.O.S.	8	I	4.3	5	200	–			20
		8	II	4.3	10	100	11; 12			–
3097	FLAMMABLE SOLID, OXIDIZING, N.O.S.	4.1	CARRIAGE PROHIBITED							
3098	OXIDIZING LIQUID, CORROSIVE, N.O.S.	5.1	I	8	0	–			24	20
		5.1	II	8	20	50			24	–
		5.1	III	8	100	10			24	–
3099	OXIDIZING LIQUID, TOXIC, N.O.S.	5.1	I	6.1	0	–			24; 28	20
		5.1	II	6.1	20	50			24; 28	–
		5.1	III	6.1	100	10			24; 28	–
3100	OXIDIZING SOLID, SELF-HEATING, N.O.S.	5.1	CARRIAGE PROHIBITED							
3101	ORGANIC PEROXIDE TYPE B, LIQUID	5.2		1	0		1; 5		15; 20; 22; 24	9; 17
3102	ORGANIC PEROXIDE TYPE B, SOLID	5.2		1	0		1; 5		15; 20; 22; 24	9; 17
3103	ORGANIC PEROXIDE TYPE C, LIQUID	5.2			10	100	1		15; 20; 22; 24	8; 18
3104	ORGANIC PEROXIDE TYPE C, SOLID	5.2			10	100	1		15; 20; 22; 24	8; 18
3105	ORGANIC PEROXIDE TYPE D, LIQUID	5.2			10	100	1		15; 22; 24	19
3106	ORGANIC PEROXIDE TYPE D, SOLID	5.2			10	100	1		15; 22; 24	19
3107	ORGANIC PEROXIDE TYPE E, LIQUID	5.2			20	50	1		15; 22; 24	
3108	ORGANIC PEROXIDE TYPE E, SOLID	5.2			20	50	1		15; 22; 24	
3109	ORGANIC PEROXIDE TYPE F, LIQUID	5.2			20	50	1		15; 22; 24	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3110	ORGANIC PEROXIDE TYPE F, SOLID	5.2			20	50	1		15; 22; 24	
3111	ORGANIC PEROXIDE TYPE B, LIQUID, TEMPERATURE CONTROLLED	5.2		1	0		8		15; 20; 21; 22; 24	4; 9; 16
3112	ORGANIC PEROXIDE TYPE B, SOLID, TEMPERATURE CONTROLLED	5.2		1	0		8		15; 20; 21; 22; 24	4; 9; 16
3113	ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED	5.2			0		8		15; 20; 21; 22; 24	4; 8; 17
3114	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED	5.2			0		8		15; 20; 21; 22; 24	4; 8; 17
3115	ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4; 18
3116	ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4; 18
3117	ORGANIC PEROXIDE TYPE E, LIQUID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4; 19
3118	ORGANIC PEROXIDE TYPE E, SOLID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4; 19
3119	ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4
3120	ORGANIC PEROXIDE TYPE F, SOLID, TEMPERATURE CONTROLLED	5.2			0		8		15; 21; 22; 24	4
3121	OXIDIZING SOLID, WATER-REACTIVE, N.O.S.	5.1	CARRIAGE PROHIBITED							
3122	TOXIC LIQUID, OXIDIZING, N.O.S.	6.1	I	5.1	5	200			1; 13; 28	9; 17
		6.1	II	5.1	5	200			13; 28	9; 19

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3123	TOXIC LIQUID, WATER-REACTIVE, N.O.S.	6.1	I	4.3	5	200			1; 13; 28	9; 17
		6.1	II	4.3	5	200			13; 28	9; 19
3124	TOXIC SOLID, SELF-HEATING, N.O.S.	6.1	I	4.2	5	200	-		1; 13; 28	9; 17
		6.1	II	4.2	5	200	11; 12		13; 28	9; 19
3125	TOXIC SOLID, WATER-REACTIVE, N.O.S.	6.1	I	4.3	5	200	-		1; 13; 28	9; 17
		6.1	II	4.3	5	200	11; 12		13; 28	9; 19
3126	SELF-HEATING SOLID, CORROSIVE, ORGANIC, N.O.S.	4.2	II	8	20	50	1			
		4.2	III	8	50	20	1			
3127	SELF-HEATING SOLID, OXIDIZING, N.O.S.	4.2	CARRIAGE PROHIBITED							
3128	SELF-HEATING SOLID, TOXIC, ORGANIC, N.O.S.	4.2	II	6.1	20	50	1		28	
		4.2	III	6.1	50	20	1		28	
3129	WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.	4.3	I	8	0	-	1		23	20
		4.3	II	8	20	50	1		23	-
		4.3	III	8	100	10	1		23	-
3130	WATER-REACTIVE LIQUID, TOXIC, N.O.S.	4.3	I	6.1	0	-	1		23; 28	20
		4.3	II	6.1	20	50	1		23; 28	-
		4.3	III	6.1	100	10	1		23; 28	-
3131	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	4.3	I	8	0	-	1		23	20
		4.3	II	8	20	50	1; 12		23	-
		4.3	III	8	100	10	1		23	-
3132	WATER-REACTIVE SOLID, FLAMMABLE, N.O.S.	4.3	CARRIAGE PROHIBITED							
3133	WATER-REACTIVE SOLID, OXIDIZING, N.O.S.	4.3	CARRIAGE PROHIBITED							
3134	WATER-REACTIVE SOLID, TOXIC, N.O.S.	4.3	I	6.1	0	-	1		23; 28	20
		4.3	II	6.1	20	50	1		23; 28	-
		4.3	III	6.1	100	10	1		23; 28	-

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3135	WATER-REACTIVE SOLID, SELF-HEATING, N.O.S.	4.3	CARRIAGE PROHIBITED							
3136	TRIFLUOROMETHANE, REFRIGERATED LIQUID	2.2			500	2	5		9; 11; 36	20
3137	OXIDIZING SOLID, FLAMMABLE, N.O.S.	5.1	CARRIAGE PROHIBITED							
3138	ETHYLENE, ACETYLENE AND PROPYLENE MIXTURE, REFRIGE-RATED LIQUID, containing at least 71,5 % ethylene with ≤ 22,5 % acetylene and ≤ 6 % propylene	2.1			100	10	5		9; 11; 36	2; 17
3139	OXIDIZING LIQUID, N.O.S.	5.1	I		20	50			24	20
		5.1	II		50	20			24	-
		5.1	III		200	5			24	-
3140	ALKALOIDS, LIQUID, N.O.S. or ALKALOID SALTS, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3141	ANTIMONY COMPOUND, INORGANIC, LIQUID, N.O.S.	6.1	III		100	10			13; 28	9
3142	DISINFECTANT, LIQUID, TOXIC, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3143	DYE, SOLID, TOXIC, N.O.S. or DYE, INTERMEDIATE, SOLID, TOXIC, N.O.S.	6.1	I		5	200	10; 12	-	1; 13; 28	9; 17
		6.1	II		50	20	11	-	13; 28	9; 19
		6.1	III		100	10	-	9b	13; 28	9
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	I		20	50				20
		8	II		50	20				-
		8	III		200	5				
3146	ORGANOTIN COMPOUND, SOLID, N.O.S.	6.1	I		5	200	10; 12	-	1; 13; 28	9; 17
		6.1	II		50	20	11	-	13; 28	9; 19
		6.1	III		100	10	-	9b	13; 28	9
3147	DYE, SOLID, CORROSIVE, N.O.S. or DYE, INTERMEDIATE, SOLID, CORROSIVE, N.O.S.	8	I		20	50	10; 12	-		20
		8	II		50	20	11	-		-
		8	III		200	5	-	9b		-
3148	WATER-REACTIVE LIQUID, N.O.S.	4.3	I		0	-	1		23	20
		4.3	II		100	10	1		23	-
		4.3	III		500	2	1		23	-
3149	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid(s), water and ≤ 5 % peroxyacetic acid, STABILIZED	5.1	II	8	20	50			24	
3150	DEVICES, SMALL, HYDROCARBON GAS POWERED or HYDROCARBON GAS REFILLS FOR SMALL DEVICES with release device	2.1			100	10			9	2
3151	POLYHALOGENATED BIPHENYLS, LIQUID or POLYHALOGENATED TERPHENYLS, LIQUID	9	II		1 000	1		15	1; 13; 28	19
3152	POLYHALOGENATED BIPHENYLS, SOLID or POLYHALOGENATED TERPHENYLS, SOLID	9	II		1 000	1		15	1; 13; 28	19
3153	PERFLUORO(METHYL VINYL ETHER)	2.1			100	10			9; 10; 36	2; 20
3154	PERFLUORO(ETHYL VINYL ETHER)	2.1			100	10			9; 10; 36	2; 20
3155	PENTACHLOROPHENOL	6.1	II		50	20	11		13; 28	9; 19
3156	COMPRESSED GAS, OXIDIZING, N.O.S.	2.2		5.1	200	5			9; 10; 36	
3157	LIQUEFIED GAS, OXIDIZING, N.O.S.	2.2		5.1	200	5			9; 10; 36	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3158	GAS, REFRIGERATED LIQUID, N.O.S.	2.2			500	2	5		9; 11; 36	20
3159	1,1,1,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 134a)	2.2			500	2			9; 10; 36	
3160	LIQUEFIED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3		2.1	10	100			9; 10; 36	2; 7; 17
3161	LIQUEFIED GAS, FLAMMABLE, N.O.S.	2.1			100	10			9; 10; 36	2; 20
3162	LIQUEFIED GAS, TOXIC, N.O.S.	2.3			10	100			9; 10; 36	7; 17
3163	LIQUEFIED GAS, N.O.S.	2.2			500	2			9; 10; 36	
3164	ARTICLES, PRESSURIZED, HYDRAULIC or PNEUMATIC (containing non-flammable gas)	2.2			500	2			9	
3165	AIRCRAFT HYDRAULIC POWER UNIT FUEL TANK (containing a mixture of anhydrous hydrazine and methylhydrazine) (M86 fuel)	3	I	6.1 8	50	20			13; 28	2; 19
3166	Engine, internal combustion or vehicle, flammable gas, powered or vehicle, flammable liquid powered	9	Non-dangerous for road transport							
3167	GAS SAMPLE, NON-PRESSURIZED, FLAMMABLE, N.O.S., not refrigerated liquid	2.1			100	10			9	2
3168	GAS SAMPLE, NON-PRESSURIZED, TOXIC, FLAMMABLE, N.O.S., not refrigerated liquid	2.3		2.1	10	100			9	2; 7
3169	GAS SAMPLE, NON-PRESSURIZED, TOXIC, N.O.S., not refrigerated liquid	2.3			10	100			9	7
3170	ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3	II		100	10	1; 12	3	23	
		4.3	III		500	2	1	1; 5	23	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3171	Battery-powered vehicle or battery-powered equipment	9	Non-dangerous for road transport							
3172	TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3174	TITANIUM DISULFIDE	4.2	III		200	5	1			
3175	SOLIDS or mixtures of solids (such as preparations and wastes) CONTAINING FLAMMABLE LIQUID, N.O.S. having a flash point $\leq 60,5$ °C c.c.	4.1	II		50	20	11; 12	3		
3176	FLAMMABLE SOLID, ORGANIC, MOLTEN, N.O.S.	4.1	II		50	20				
		4.1	III		500	2				
3178	FLAMMABLE SOLID, INORGANIC, N.O.S.	4.1	II		50	20	11	–		
		4.1	III		500	2	–	1		
3179	FLAMMABLE SOLID, TOXIC, INORGANIC, N.O.S.	4.1	II	6.1	10	100	11; 12		28	
		4.1	III	6.1	20	50	12		28	
3180	FLAMMABLE SOLID, CORROSIVE, INORGANIC, N.O.S.	4.1	II	8	10	100	11; 12			
		4.1	III	8	20	50	12			
3181	METAL SALTS OF ORGANIC COMPOUNDS, FLAMMABLE, N.O.S.	4.1	II		50	20	11	–		
		4.1	III		500	2	–	1		
3182	METAL HYDRIDES, FLAMMABLE, N.O.S.	4.1	II		50	20		–		
		4.1	III		500	2		1		
3183	SELF-HEATING LIQUID, ORGANIC, N.O.S.	4.2	II		100	10	1			
		4.2	III		200	5	1			
3184	SELF-HEATING LIQUID, TOXIC, ORGANIC, N.O.S.	4.2	II	6.1	20	50	1		28	
		4.2	III	6.1	50	20	1		28	
3185	SELF-HEATING LIQUID, CORROSIVE, ORGANIC, N.O.S.	4.2	II	8	20	50	1			
		4.2	III	8	50	20	1			

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3186	SELF-HEATING LIQUID, INORGANIC, N.O.S.	4.2	II		100	10	1			
		4.2	III		200	5	1			
3187	SELF-HEATING LIQUID, TOXIC, INORGANIC, N.O.S.	4.2	II	6.1	20	50	1		28	
		4.2	III	6.1	50	20	1		28	
3188	SELF-HEATING LIQUID, CORROSIVE, INORGANIC, N.O.S.	4.2	II	8	20	50	1			
		4.2	III	8	50	20	1			
3189	METAL POWDER, SELF-HEATING, N.O.S.	4.2	II		100	10	1; 12	–		
		4.2	III		200	5	1	4		
3190	SELF-HEATING SOLID, INORGANIC, N.O.S.	4.2	II		100	10	1; 12	–		
		4.2	III		200	5	1	4		
3191	SELF-HEATING SOLID, TOXIC, INORGANIC, N.O.S.	4.2	II	6.1	20	50	1		28	
		4.2	III	6.1	50	20	1		28	
3192	SELF-HEATING SOLID, CORROSIVE, INORGANIC, N.O.S.	4.2	II	8	20	50	1			
		4.2	III	8	50	20	1			
3194	PYROPHORIC LIQUID, INORGANIC, N.O.S.	4.2	I		0		1			20
3200	PYROPHORIC SOLID, INORGANIC, N.O.S.	4.2	I		0		1			20
3205	ALKALINE EARTH METAL ALCOHOLATES, N.O.S.	4.2	II		100	10	1; 12			
		4.2	III		200	5	1			
3206	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.	4.2	II	8	20	50	1			
		4.2	III	8	50	20	1			
3208	METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.	4.3	I		0	–	1	–	23	20
		4.3	II		100	10	1; 12	–	23	–
		4.3	III		500	2	1	5	23	–
3209	METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S.	4.3	I	4.2	0	–	1	–	23	20
		4.3	II	4.2	20	50	1	–	23	–
		4.3	III	4.2	100	10	1	5	23	–

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3210	CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20			24	
		5.1	III		200	5			24	
3211	PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20	6		24	
		5.1	III		200	5	6		24	
3212	HYPOCHLORITES, INORGANIC, N.O.S.	5.1	II		50	20	11		24	
3213	BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20	6		24	
		5.1	III		200	5	–		24	
3214	PERMANGANATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20			24	
3215	PERSULFATES INORGANIC, N.O.S.	5.1	III		200	5		8	24	
3216	PERSULFATES INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III		200	5			24	
3218	NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20			24	
		5.1	III		200	5			24	
3219	NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II		50	20			24	
		5.1	III		200	5			24	
3220	PENTAFLUOROETHANE (REFRIGERANT GAS R 125)	2.2			500	2			9; 10; 36	
3221	SELF-REACTIVE LIQUID, TYPE B	4.1		1	0		1		15; 20; 22	9; 17
3222	SELF-REACTIVE SOLID, TYPE B	4.1		1	0		1		15; 20; 22	9; 17
3223	SELF-REACTIVE LIQUID, TYPE C	4.1			10	100	1		15; 20; 22	8; 18
3224	SELF-REACTIVE SOLID, TYPE C	4.1			10	100	1		15; 20; 22	8; 18
3225	SELF-REACTIVE LIQUID, TYPE D	4.1			10	100	1		15; 22	19
3226	SELF-REACTIVE SOLID, TYPE D	4.1			10	100	1		15; 22	19
3227	SELF-REACTIVE LIQUID, TYPE E	4.1			20	50	1		15; 22	
3228	SELF-REACTIVE SOLID, TYPE E	4.1			20	50	1		15; 22	
3229	SELF-REACTIVE LIQUID, TYPE F	4.1			20	50	1		15; 22	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3230	SELF-REACTIVE SOLID, TYPE F	4.1			20	50	1		15; 22	
3231	SELF-REACTIVE LIQUID, TYPE B, TEMPERATURE CONTROLLED	4.1		1	0		8		15; 20; 21; 22	4; 9; 16
3232	SELF-REACTIVE SOLID, TYPE B, TEMPERATURE CONTROLLED	4.1		1	0		8		15; 20; 21; 22	4; 9; 16
3233	SELF-REACTIVE LIQUID, TYPE C, TEMPERATURE CONTROLLED	4.1			0		8		15; 20; 21; 22	4; 8; 17
3234	SELF-REACTIVE SOLID, TYPE C, TEMPERATURE CONTROLLED	4.1			0		8		15; 20; 21; 22	4; 8; 17
3235	SELF-REACTIVE LIQUID, TYPE D, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4; 18
3236	SELF-REACTIVE SOLID, TYPE D, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4; 18
3237	SELF-REACTIVE LIQUID, TYPE E, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4; 19
3238	SELF-REACTIVE SOLID, TYPE E, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4; 19
3239	SELF-REACTIVE LIQUID, TYPE F, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4
3240	SELF-REACTIVE SOLID, TYPE F, TEMPERATURE CONTROLLED	4.1			0		8		15; 21; 22	4
3241	2-BROMO-2-NITRO-PROPANE-1,3-DIOL	4.1	III		500	2			14	14
3242	AZODICARBONAMIDE	4.1	II		50	20			14	14
3243	SOLIDS CONTAINING TOXIC LIQUID, N.O.S.	6.1	II		50	20		10	13; 28	9; 19
3244	SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S.	8	II		50	20		10		
3245	GENETICALLY MODIFIED MICRO-ORGANISMS	9			50	20			1; 13; 26; 27; 28	17
3246	METHANESULFONYL CHLORIDE	6.1	I	8	5	200			1; 13; 28	9; 17
3247	SODIUM PEROXY-BORATE, ANHYDROUS	5.1	II		50	20			24	

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	II	6.1	200	5			13; 28	2; 19
		3	III	6.1	500	2			13; 28	2
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1	II		50	20		–	13; 28	9; 19
		6.1	III		100	10		9b	13; 28	9
3250	CHLOROACETIC ACID, MOLTEN	6.1	II	8	5	200			13	9; 19
3251	ISOSORBIDE-5-MONO-NITRATE	4.1	III		500	2			14	14
3252	DIFLUOROMETHANE (REFRIGERANT GAS R 32)	2.1			100	10			9; 10; 36	2; 20
3253	DISODIUM TRIOXO-SILICATE	8	III		200	5		9b		
3254	TRIBUTYLPHOSPHANE	4.2	I		0		1			
3255	tert-BUTYL HYPO-CHLORITE	4.2	CARRIAGE PROHIBITED							
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S., with flash point > 60,5 °C c.c., at or above its flash point	3	III		1 000	1				2
3257	ELEVATED TEMPERATURE LIQUID, N.O.S., at or above 100 °C and below its flash point (including molten metals, molten salts, etc.)	9	III		1 000	1		12		
3258	ELEVATED TEMPERATURE SOLID, N.O.S., at or above 240 °C	9	III		1 000	1		13		
3259	AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–
3260	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3261	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–
3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–
3263	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.	8	I		20	50	10; 12	–		20
		8	II		50	20	11	–		–
		8	III		200	5	–	9b		–
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	I		20	50				20
		8	II		50	20				–
		8	III		200	5				–
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	I		20	50				20
		8	II		50	20				–
		8	III		200	5				–
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	I		20	50				20
		8	II		50	20				–
		8	III		200	5				–
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	I		20	50				20
		8	II		50	20				–
		8	III		200	5				–
3268	AIR BAG INFLATORS or AIR BAG MODULES or SEAT-BELT PRETENSIONERS	9	III		50	20				
3269	POLYESTER RESIN KIT	3	II		500	2				2; 20
		3	III		1 000	1				2
3270	NITROCELLULOSE MEMBRANE FILTERS, with ≤ 12,6 % nitrogen, by dry mass	4.1	II		50	20				

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3271	ETHERS, N.O.S.	3	II		500	2				2; 20
		3	III		1 000	1				2
3272	ESTERS, N.O.S.	3	II		500	2				2; 20
		3	III		1 000	1				2
3273	NITRILES, FLAMMABLE, TOXIC, N.O.S.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
3274	ALCOHOLATES SOLUTION, N.O.S., in alcohol	3	II	8	200	5				2; 20
3275	NITRILES, TOXIC, FLAMMABLE, N.O.S.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
3276	NITRILES, TOXIC, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3277	CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S.	6.1	II	8	5	200			13; 28	9; 19
3278	ORGANOPHOSPHORUS COMPOUND, TOXIC, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3279	ORGANOPHOSPHORUS COMPOUND, TOXIC, FLAMMABLE, N.O.S.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
3280	ORGANOARSENIC COMPOUND, LIQUID N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3281	METAL CARBONYL, LIQUID N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3282	ORGANOMETALLIC COMPOUND, TOXIC, LIQUID N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3284	TELLURIUM COMPOUND, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3285	VANADIUM COMPOUND, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	I	6.1 8	50	20			13; 28	2; 19
		3	II	6.1 8	200	5			13; 28	2; 19
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3288	TOXIC SOLID, INORGANIC, N.O.S.	6.1	I		5	200	–	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3289	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.	6.1	I	8	5	200			1; 13; 28	9; 17
		6.1	II	8	5	200			13; 28	9; 19
3290	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S.	6.1	I	8	5	200	–		1; 13; 28	9; 17
		6.1	II	8	5	200	11; 12		13; 28	9; 19
3291	CLINICAL WASTE, UNSPECIFIED, N.O.S. or (BIO) MEDICAL WASTE, N.O.S. or REGULATED MEDICAL WASTE, N.O.S.	6.2	II		0		1	11	13; 25; 28	3
3292	BATTERIES, CONTAINING SODIUM or CELLS, CONTAINING SODIUM	4.3	II		100	10	1		23	
3293	HYDRAZINE, AQUEOUS SOLUTION with ≤ 37 % hydrazine, by mass	6.1	III		100	10			13; 28	9
3294	HYDROGEN CYANIDE, SOLUTION IN ALCOHOL with ≤ 45 % hydrogen cyanide	6.1	I	3	5	200			1; 13; 28	2; 9; 17
3295	HYDROCARBONS, LIQUID, N.O.S.	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
3296	HEPTAFLUOROPROPANE (REFRIGERANT GAS R 227)	2.2			500	2			9; 10; 36	
3297	ETHYLENE OXIDE AND CHLOROTETRAFLUOROETHANE MIXTURE with ≤ 8,8 % ethylene oxide	2.2			500	2			9; 10; 36	
3298	ETHYLENE OXIDE AND PENTAFLUOROETHANE MIXTURE with ≤ 7,9 % ethylene oxide	2.2			500	2			9; 10; 36	
3299	ETHYLENE OXIDE AND TETRAFLUOROETHANE MIXTURE with ≤ 5,6 % ethylene oxide	2.2			500	2			9; 10; 36	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3300	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with > 87 % ethylene oxide	2.3		2.1	10	100			9; 10; 36	2; 7; 17
3301	CORROSIVE LIQUID, SELF-HEATING, N.O.S.	8	I	4.2	5	200				20
		8	II	4.2	10	100				-
3302	2-DIMETHYLAMINO-ETHYL ACRYLATE	6.1	II		50	20			13; 28	9; 19
3303	COMPRESSED GAS, TOXIC, OXIDIZING, N.O.S.	2.3		5.1	10	100			9; 10; 36	7; 17
3304	COMPRESSED GAS, TOXIC, CORROSIVE, N.O.S.	2.3		8	10	100			9; 10; 36	7; 17
3305	COMPRESSED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3		2.1 8	10	100			9; 10; 36	2; 7; 17
3306	COMPRESSED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3		5.1 8	10	100			9; 10; 36	7; 17
3307	LIQUEFIED GAS, TOXIC, OXIDIZING, N.O.S.	2.3		5.1	10	100			9; 10; 36	7; 17
3308	LIQUEFIED GAS, TOXIC, CORROSIVE, N.O.S.	2.3		8	10	100			9; 10; 36	7; 17
3309	LIQUEFIED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3		2.1 8	10	100			9; 10; 36	2; 7; 17
3310	LIQUEFIED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3		5.1 8	10	100			9; 10; 36	7; 17
3311	GAS, REFRIGERATED LIQUID, OXIDIZING, N.O.S.	2.2		5.1	200	5	5		9; 11; 36	20
3312	GAS, REFRIGERATED LIQUID, FLAMMABLE, N.O.S.	2.1			100	10	5		9; 11; 36	2; 17
3313	ORGANIC PIGMENTS, SELF-HEATING	4.2	II		100	10	1			
		4.2	III		200	5	1			
3314	PLASTICS MOULDING COMPOUND in dough, sheet or extruded rope form evolving flammable vapour	9	III		500	2		3		
3315	CHEMICAL SAMPLE, TOXIC	6.1	I		5	200			1; 13; 28	9; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3316	CHEMICAL KIT or FIRST AID KIT	9	II		500	2				
		9	III		1 000	1				
3317	2-AMINO-4,6-DINITRO-PHENOL, WETTED with ≥ 20 % water, by mass	4.1	I		0					17
3318	AMMONIA SOLUTION, relative density < 0,880 at 15 °C in water, with > 50 % ammonia	2.3		8	10	100			9; 10	7
3319	NITROGLYCERIN MIXTURE, DESENSITIZED, SOLID, N.O.S., with > 2 % but ≤ 10 % nitroglycerin, by mass	4.1	II		50	20				17
3320	SODIUM BOROHYDRIDE AND SODIUM HYDROXIDE SOLUTION, with ≤ 12 % sodium borohydride and ≤ 40 % sodium hydroxide by mass	8	II		50	20				
		8	III		200	5				
3334	Aviation regulated liquid, n.o.s.	9	Non-dangerous for road transport							
3335	Aviation regulated solid, n.o.s.	9	Non-dangerous for road transport							
3336	MERCAPTANS, LIQUID, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.	3	I		100	10				2; 20
		3	II		500	2				2; 20
		3	III		1 000	1				2
3337	REFRIGERANT GAS R 404A (Pentafluoroethane, 1,1,1-trifluoroethane and 1,1,1,2-tetrafluoroethane zeotropic mixture with ca 44 % pentafluoroethane and 52 % trifluoroethane)	2.2			500	2			9; 10; 36	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3338	REFRIGERANT GAS R 407A (Difluoromethane, pentafluoroethane and 1,1,1,2-tetrafluoroethane zeotropic mixture with ca 20 % difluoromethane and 40 % pentafluoroethane)	2.2			500	2			9; 10; 36	
3339	REFRIGERANT GAS R 407B (Difluoromethane, pentafluoroethane and 1,1,1,2-tetrafluoroethane zeotropic mixture with ca 10 % difluoromethane and 70 % pentafluoroethane)	2.2			500	2			9; 10; 36	
3340	REFRIGERANT GAS R 407C (Difluoromethane, pentafluoroethane and 1,1,1,2-tetrafluoroethane zeotropic mixture with ca 23 % difluoromethane and 25 % pentafluoroethane)	2.2			500	2			9; 10; 36	
3341	THIOUREA DIOXIDE	4.2	II		100	10	1; 12			
		4.2	III		200	5	1			
3342	XANTHATES	4.2	II		100	10	1; 12			
		4.2	III		200	5	1			
3343	NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, FLAMMABLE, N.O.S., with ≤ 30 % nitroglycerin, by mass	3			100	10				2; 17
3344	PENTAERYTHRITATE TETRANITRATE MIXTURE, DESENSITIZED, SOLID, N.O.S., with > 10 % ≤ 20 % PETN, by mass	4.1	II		50	20				17
3345	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3346	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
3347	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3348	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3349	PYRETHROID PESTICIDE, SOLID, TOXIC	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3350	PYRETHROID PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash point < 23 °C c.c.	3	I	6.1	50	20			13; 28	2; 19
		3	II	6.1	200	5			13; 28	2; 19
3351	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point ≥ 23 °C c.c.	6.1	I	3	5	200			1; 13; 28	2; 9; 17
		6.1	II	3	5	200			13; 28	2; 9; 19
		6.1	III	3	50	20			13; 28	2; 9
3352	PYRETHROID PESTICIDE, LIQUID, TOXIC	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3354	INSECTICIDE GAS, FLAMMABLE, N.O.S.	2.1			100	10			9; 10; 36	2; 20
3355	INSECTICIDE GAS, TOXIC, FLAMMABLE, N.O.S.	2.3		2.1	10	100			9; 10; 36	2; 7; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3356	OXYGEN GENERATOR, CHEMICAL	5.1	II		50	20			24	
3357	NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, N.O.S., with ≤ 30 % nitroglycerin, by mass	3	II		500	2				2; 17
3358	REFRIGERATING MACHINES containing flammable, non-toxic, liquefied gas	2.1			100	10			9	2
3359	FUMIGATED UNIT	9			1 000	1				
3360	Fibres, vegetable, dry	4.1	Non-dangerous for road transport							
3361	CHLOROSILANES, TOXIC, CORROSIVE, N.O.S.	6.1	II	8	5	200			13; 28	9; 19
3362	CHLOROSILANES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	II	8 3	5	200			13; 28	2; 9; 19
3363	Dangerous goods in machinery or dangerous goods in apparatus	9	Non-dangerous for road transport							
3364	TRINITROPHENOL (PICRIC ACID), WETTED, with ≥ 10 % water, by mass	4.1	I		0					17
3365	TRINITROCHLORO-BENZENE (PICRYL CHLORIDE) wetted with ≥ 10 % water, by mass	4.1	I		0					17
3366	TRINITROTOLUENE (TNT), wetted with ≥ 10 % water, by mass	4.1	I		0					17
3367	TRINITROBENZENE, wetted with ≥ 10 % water, by mass	4.1	I		0					17
3368	TRINITROBENZOIC ACID, wetted with ≥ 10 % water, by mass	4.1	I		0					17
3369	SODIUM DINITRO-ortho-CRESOLATE, WETTED with ≥ 10 % water, by mass	4.1	I	6.1	0				13; 28	17
3370	UREA NITRATE, wetted with ≥ 10 % water, by mass	4.1	I		0					17
3371	2-METHYLBUTANAL	3	II		500	2				2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3373	DIAGNOSTIC SPECIMENS or CLINICAL SPECIMENS	6.2			0					3
3374	ACETYLENE, SOLVENT FREE	2.1			100	10			9; 10; 36	2
3375	AMMONIUM NITRATE EMULSION or SUSPENSION or GEL, intermediate for blasting explosives, liquid or solid	5.1	II		50	20			24	9; 14
3376	4-NITROPHENYL-HYDRAZINE, with $\geq 30\%$ water, by mass	4.1	I		0		1			17
3377	SODIUM PERBORATE MONOHYDRATE	5.1	III		200	5		8	24	
3378	SODIUM CARBONATE PEROXYHYDRATE	5.1	II		50	20	11	8	24	
		5.1	III		200	5	–	8	24	
3379	DESENSITIZED EXPLOSIVE, LIQUID, N.O.S.	3	I		100	10				2; 20
3380	DESENSITIZED EXPLOSIVE, SOLID, N.O.S.	4.1	I		0					17
3381	TOXIC BY INHALATION, LIQUID, N.O.S. with an inhalation toxicity ≤ 200 mL/m ³ and saturated vapour concentration ≥ 500 LC ₅₀	6.1	I		5	200			1; 13; 28	9; 17
3382	TOXIC BY INHALATION, LIQUID, N.O.S. with an inhalation toxicity $\leq 1\,000$ mL/m ³ and saturated vapour concentration ≥ 10 LC ₅₀	6.1	I		5	200			1; 13; 28	9; 17
3383	TOXIC BY INHALATION, LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity ≤ 200 mL/m ³ and saturated vapour concentration ≥ 500 LC ₅₀	6.1	I	3	5	200			1; 13; 28	2; 9; 17

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3384	TOXIC BY INHALATION, LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity $\leq 1\ 000\ \text{mL/m}^3$ and saturated vapour concentration $\geq 10\ \text{LC}_{50}$	6.1	I	3	5	200			1; 13; 28	2; 9; 17
3385	TOXIC BY INHALATION, LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity $\leq 200\ \text{mL/m}^3$ and saturated vapour concentration $\geq 500\ \text{LC}_{50}$	6.1	I	4.3	5	200			1; 13; 28	9; 17
3386	TOXIC BY INHALATION, LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity $\leq 1\ 000\ \text{mL/m}^3$ and saturated vapour concentration $\geq 10\ \text{LC}_{50}$	6.1	I	4.3	5	200			1; 13; 28	9; 17
3387	TOXIC BY INHALATION, LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity $\leq 200\ \text{mL/m}^3$ and saturated vapour concentration $\geq 500\ \text{LC}_{50}$	6.1	I	5.1	5	200			1; 13; 28	9; 17
3388	TOXIC BY INHALATION, LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity $\leq 1\ 000\ \text{mL/m}^3$ and saturated vapour concentration $\geq 10\ \text{LC}_{50}$	6.1	I	5.1	5	200			1; 13; 28	9; 17
3389	TOXIC BY INHALATION, LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity $\leq 200\ \text{mL/m}^3$ and saturated vapour concentration $\geq 500\ \text{LC}_{50}$	6.1	I	8	5	200			1; 13; 28	9; 17
3390	TOXIC BY INHALATION, LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity $\leq 1\ 000\ \text{mL/m}^3$ and saturated vapour concentration $\geq 10\ \text{LC}_{50}$	6.1	I	8	5	200			1; 13; 28	9; 17
3391	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC	4.2	I		0		1			20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3392	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC	4.2	I		0		1			20
3393	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE	4.2	I	4.3	0		1			20
3394	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER-REACTIVE	4.2	1	4.3	0		1			20
3395	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE	4.3	I		0	–	1		23	20
		4.3	II		100	10	1		23	–
		4.3	III		500	2	1		23	–
3396	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE	4.3	I	4.1	0	–	1		23	
		4.3	II	4.1	20	50	1		23	
		4.3	III	4.1	100	10	1		23	
3397	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING	4.3	I	4.2	0	–	1		23	20
		4.3	II	4.2	20	50	1		23	–
		4.3	III	4.2	100	10	1		23	–
3398	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE	4.3	I		0	–	1		23	20
		4.3	II		100	10	1		23	–
		4.3	III		500	2	1		23	–
3399	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	4.3	I	3	0	–	1		23	2; 20
		4.3	II	3	20	50	1		23	2
		4.3	III	3	100	10	1		23	2
3400	ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING	4.2	II		100	10	1; 12			
		4.2	III		200	5	1			
3401	ALKALI METAL AMALGAM, SOLID	4.3	I		0		1		23	20
3402	ALKALINE EARTH METAL AMALGAM, SOLID	4.3	I		0		1		23	20
3403	POTASSIUM METAL ALLOYS, SOLID	4.3	I		0		1		23	20
3404	POTASSIUM SODIUM ALLOYS, SOLID	4.3	I		0		1		23	20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3405	BARIUM CHLORATE SOLUTION	5.1	II	6.1	20	50			24; 28	
		5.1	III	6.1	100	10			24; 28	
3406	BARIUM PERCHLORATE SOLUTION	5.1	II	6.1	20	50			24; 28	
		5.1	III	6.1	100	10			24; 28	
3407	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE SOLUTION	5.1	II		50	20			24	
		5.1	III		200	5			24	
3408	LEAD PERCHLORATE SOLUTION	5.1	II	6.1	20	50			24; 28	
		5.1	III	6.1	100	10			24; 28	
3409	CHLORONITRO-BENZENES, LIQUID	6.1	II		50	20			13; 28	9; 19
3410	4-CHLORO-o-TOLUIDINE HYDROCHLORIDE SOLUTION	6.1	III		100	10			13; 28	9
3411	beta-NAPHTHYLAMINE SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3413	POTASSIUM CYANIDE SOLUTION	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3414	SODIUM CYANIDE SOLUTION	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3415	SODIUM FLUORIDE SOLUTION	6.1	III		100	10			13; 28	9
3416	CHLOROACETO-PHENONE, LIQUID	6.1	II		50	20			13; 28	9; 19
3417	XYLYL BROMIDE, SOLID	6.1	II		50	20	11		13; 28	9; 19
3418	2,4-TOLUYLENE-DIAMINE SOLUTION	6.1	III		100	10			13; 28	9
3419	BORON TRIFLUORIDE ACETIC ACID COMPLEX, SOLID	8	II		50	20	11			
3420	BORON TRIFLUORIDE PROPIONIC ACID COMPLEX, SOLID	8	II		50	20	11			
3421	POTASSIUM HYDROGEN DIFLUORIDE SOLUTION	8	II	6.1	10	100			13; 28	
		8	III	6.1	50	20			13; 28	

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Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3422	POTASSIUM FLUORIDE SOLUTION	6.1	III		100	10			13; 28	9
3423	TETRAMETHYL-AMMONIUM HYDROXIDE, SOLID	8	II		50	20	11			
3424	AMMONIUM DINITRO- <i>o</i> -CRESOLATE SOLUTION	6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9
3425	BROMOACETIC ACID, SOLID	8	II		50	20	11			
3426	ACRYLAMIDE SOLUTION	6.1	III		100	10			13; 28	9
3427	CHLOROBENZYL CHLORIDES, SOLID	6.1	III		100	10		9b	13; 28	9
3428	3-CHLORO-4-METHYL-PHENYL ISOCYANATE, SOLID	6.1	II		50	20	11		13; 28	9; 19
3429	CHLOROTOLUIDINES, LIQUID	6.1	III		100	10			13; 28	9
3430	XYLENOLS, LIQUID	6.1	II		50	20			13; 28	9; 19
3431	NITROBENZO-TRIFLUORIDES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3432	POLYCHLORINATED BIPHENYLS, SOLID	9	II		500	2	15		1; 13; 28	19
3433	LITHIUM ALKYLs, SOLID	4.2	I	4.3	0		1			20
3434	NITROCRESOLS, LIQUID	6.1	III		100	10			13; 28	9
3435	HYDROQUINONE SOLUTION	6.1	III		100	10			13; 28	9
3436	HEXAFLUOROACETONE HYDRATE, SOLID	6.1	II		50	20	11		13; 28	9; 19
3437	CHLOROCRESOLS, SOLID	6.1	II		50	20	11		13; 28	9; 19
3438	alpha-METHYLBENZYL ALCOHOL, SOLID	6.1	III		100	10		9b	13; 28	9
3439	NITRILES, TOXIC, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1	I		5	200			1; 13; 28	9; 17
		6.1	II		50	20			13; 28	9; 19
		6.1	III		100	10			13; 28	9

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3441	CHLORODINITRO-BENZENES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3442	DICHLOROANILINES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3443	DINITROBENZENES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3444	NICOTINE HYDRO-CHLORIDE, SOLID	6.1	II		50	20			13; 28	9; 19
3445	NICOTINE SULFATE, SOLID	6.1	II		50	20	11		13; 28	9; 19
3446	NITROTOLUENES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3447	NITROXYLENES, SOLID (ortho-/ meta-/ para-)	6.1	II		50	20	11		13; 28	9; 19
3448	TEAR GAS SUBSTANCE, SOLID, N.O.S.	6.1	I		5	200	-		1; 13; 28	9; 17
		6.1	II		50	20	11		13; 28	9; 19
3449	BROMOBENZYL CYANIDES, SOLID	6.1	I		5	200			1; 13; 28	9; 17
3450	DIPHENYLCHLORO-ARSINE, SOLID	6.1	I		5	200	10; 12		1; 13; 28	9; 17
3451	TOLUIDINES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3452	XYLIDINES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3453	PHOSPHORIC ACID, SOLID	8	III		200	5		9b		
3454	DINITROTOLUENES, SOLID	6.1	II		50	20	11		13; 28	9; 19
3455	CRESOLS, SOLID	6.1	II	8	5	200	11		13; 28	9; 19
3456	NITROSYLSULFURIC ACID, SOLID	8	II		50	20	11			
3457	CHLORONITRO-TOLUENES, SOLID	6.1	III		100	10		9b	13; 28	9
3458	NITROANISOLES, SOLID	6.1	III		100	10		9b	13; 28	9
3459	NITROBROMO-BENZENES, SOLID	6.1	III		100	10		9b	13; 28	9
3460	N-ETHYLBENZYL-TOLUIDINES, SOLID	6.1	III		100	10		9b	13; 28	9
3461	ALUMINIUM ALKYL HALIDES, SOLID	4.2	I	4.3	0		1			20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3462	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.,	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3464	ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3465	ORGANOARSENIC COMPOUND, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3466	METAL CARBONYLS, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3467	ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S.	6.1	I		5	200	10; 12	–	1; 13; 28	9; 17
		6.1	II		50	20	11	–	13; 28	9; 19
		6.1	III		100	10	–	9b	13; 28	9
3468	HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM or HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM CONTAINED IN EQUIPMENT IN A METAL HYDRIDE STORAGE SYSTEM PACKED WITH EQUIPMENT	2.1			100	10			9; 10; 36	2; 20

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3469	PAINT,FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)	3	I	8	50	20				2; 20
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)	3	II	8	200	5				2; 20
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)	3	III	8	500	2	12			2
3470	PAINT, CORROSIVE, FLAMMABLE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE (including paint thinning or reducing compound)	8	II	3	10	100				2
3471	HYDROGENDIFLUORIDES SOLUTION, N.O.S	8	II	6.1	10	100			13; 28	
3471	HYDROGENDIFLUORIDES SOLUTION, N.O.S	8	III	6.1	50	20	12		13; 28	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3472	CROTONIC ACID, LIQUID	8	III		200	5	12			
3473	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing flammable liquids	3			1000	1				2
3474	1-HYDROXYBENZOTRIAZOLE, ANYDROUS, WETTED with not less than 20 % water, by mass	4.1	I		0					17
3475	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 10 % ethanol	3	II		500	2				2; 20
3476	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing water-reactive substances	4.3			1000	1	1		23	
3477	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing corrosive substances	8			1000	1				
3478	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing liquefied flammable gas	2.1			100	10			9; 12	2

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3479	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing hydrogen in metal hydride	2.1			100	10			9; 12	2
3480	LITHIUM ION BATTERIES (including lithium ion polymer batteries)	9	II		500	2				
3481	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)	9	II		500	2				
3482	ALKALI METAL DISPENSION, FLAMMABLE or ALKALINE EARTH METAL DISPENSION, FLAMMABLE	4.3	I	3	0		1		23	2; 20
3483	MOTOR FUEL ANTIKNOCK MIXTURE, FLAMMABLE	6.1	I	3	5	200			1; 13; 28	2; 9; 14
3484	HYDRAZINE AQUEOUS SOLUTION, FLAMMABLE with more than 37 % hydrazine, by mass	8	I	3 6.1	0				13; 28	2; 14
3485	CALCIUM HYPOCHLORITE, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE, with more than 39 % available chlorine (8,8 % available oxygen)	5.1	II	8	20	50	11		24; 35	
3486	CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10 % but not more than 39 % available chlorine	5.1	III	8	100	10			24; 35	

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3487	CALCIUM HYPOCHLORITE, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE, with not less than 5,5 % but not more than 16 % water	5.1	II	8	20	50	11		24; 35	
3488	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S with an inhalation toxicity $\leq 200 \text{ mL/m}^3$ and saturated vapour concentration $\geq 500 \text{ LC}_{50}$	6.1	I	3 8	5	200			1; 13; 28	2; 9; 14
3489	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S with an inhalation toxicity $\leq 1\ 000 \text{ mL/m}^3$ and saturated vapour concentration $\geq 10 \text{ LC}_{50}$	6.1	I	3 8	5	200			1; 13; 28	2; 9; 14
3490	TOXIC BY INHALATION LIQUID, WATER-REACTIVE; FLAMMABLE, N.O.S with an inhalation toxicity $\leq 200 \text{ mL/m}^3$ and saturated vapour concentration $\geq 500 \text{ LC}_{50}$	6.1	I	4.3 3	20	50			1; 13; 28	2; 9; 14
3491	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, CORROSIVE, N.O.S with an inhalation toxicity $\leq 200 \text{ mL/m}^3$ and saturated vapour concentration $\geq 500 \text{ LC}_{50}$	6.1	I	4.3 3	20	50			1; 13; 28	2; 9; 14
3492	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S with an inhalation toxicity $\leq 200 \text{ mL/m}^3$ and saturated vapour concentration $\geq 500 \text{ LC}_{50}$	6.1	I	3 8	5	200			1; 13; 28	2; 9; 14

Table C.1 (continued)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3493	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S with an inhalation toxicity $\leq 1\ 000\ \text{mL/m}^3$ and saturated vapour concentration $\geq 10\ \text{LC}_{50}$	6.1	I	3 8	5	200			1; 13; 28	2; 9; 14
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	I	6.1	50	20			13; 28	2; 22
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	II	6.1	200	5			13; 28	2; 19
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	III	6.1	500	2	12		13; 28	2
3495	IODINE	8	III	6.1	50	20		9a; 9b	13; 28	
3496	BATTERIES, NICKEL-METAL HYDRIDE	9			50	20			1; 13; 26; 27; 28	17
3497	KRILL MEAL	4.2	II		100	10	1			
3497	KRILL MEAL	4.2	III		200	5	1	4		
3498	IODINE MONOCHLORIDE, LIQUID	8	II		50	20				
3499	CAPACITOR, electric double layer (with an energy storage capacity greater than 0,3 Wh)	9			50	20			1; 13; 26; 27; 28	17
3500	CHEMICAL UNDER PRESURE, N.O.S.	2.2			500	2			9; 10; 12; 36	
3501	CHEMICAL UNDER PRESURE, FLAMMABLE, N.O.S.	2.1			100	10			9; 10; 12; 36	2
3502	CHEMICAL UNDER PRESURE, TOXIC, N.O.S.	2.2		6.1	20	50			9; 10; 12; 28; 36	
3503	CHEMICAL UNDER PRESURE, CORROSIVE, N.O.S.	2.2		8	200	5			9; 10; 12; 36	
3504	CHEMICAL UNDER PRESURE, FLAMMABLE, TOXIC, N.O.S.	2.1		6.1	20	50			9; 10; 12; 28; 36	2
3505	CHEMICAL UNDER PRESSURE, FLAMMABLE, CORROSIVE, N.O.S.	2.1		8	20	50			9; 10; 12; 36	2

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Table C.1 (concluded)

1	2	3	4	5	6	7	8	9	10	11
UN No.	Proper shipping name	Class	Packing group	Subs risk	Exempt quantities	F	P, B, L and O provisions			
							P	B	L	O
3506	MERCURY CONTAINED IN MANUFACTURED ARTICLES	8	III	6.1	50	20			13; 28	
<p>NOTE 1 The requirements for dangerous goods in limited and excepted quantities are given in SANS 10229-1.</p> <p>NOTE 2 The requirements for the packaging of dangerous goods are given in SANS 10229-1.</p> <p>NOTE 3 The requirements for the large packaging of dangerous goods are given in SANS 10229-2.</p> <p>NOTE 4 The requirements for IBCs are given in SANS 10233.</p> <p>NOTE 5 The requirements for portable tanks and bulk containers are given in SANS 1518.</p>										

C.2 Special P provisions for the carriage of packaged goods

When special P provisions are shown in column 8 of table C.1, the provisions P1 to P7 given in table C.2 shall apply.

Table C.2 — Special P provisions for the carriage of packaged goods

1	2
P provision	Description
P1	Packages shall be loaded onto closed or sheeted vehicles or into closed or sheeted containers.
P2	Less than full packages may only be transported in transport receptacles approved by the competent authority.
P3	May only be transported in the original manufacturer supplied packaging as authorized by the competent authority.
P4	Reserved.
P5	Packages may not be carried in small containers.
P6	Flexible IBCs shall be carried in closed vehicles or in closed containment units, in sheeted vehicles or in sheeted containment units. The sheet shall be of an impermeable and non-combustible material.
P7	Reserved.
P8	<p>The following provisions shall apply:</p> <ul style="list-style-type: none"> a) Organic peroxides and self-reactive substances shall be forwarded in such a manner that control temperatures are never exceeded. b) The means of temperature control chosen for the transport operation depend on a number of factors such as <ul style="list-style-type: none"> 1) the control temperature(s) of the substance(s) to be carried, 2) the difference between the control temperature and the expected ambient temperature, 3) the effectiveness of the thermal insulation, 4) the duration of the transport operation, 5) the safety margin to be allowed for delays en route. c) Suitable methods to prevent the control temperature from being exceeded are listed below, in ascending order of effectiveness: <ul style="list-style-type: none"> M1 Thermal insulation, provided that the initial temperature of the substance is sufficiently below the control temperature. M2 Thermal insulation and coolant system, provided that <ul style="list-style-type: none"> 1) an adequate quantity of non-flammable coolant (for example liquid nitrogen or solid carbon dioxide), allowing a reasonable margin for possible delay, is carried or a means of replenishment is assured, 2) there is a uniform cooling effect even when most of the coolant has been consumed, 3) the need to ventilate the transport unit before entering is clearly indicated by a warning on the door(s).

Table C.2 (continued)

1	2
P provision	Description
	<p>M3 Thermal insulation and single mechanical refrigeration, provided that for substances with a flash point lower than the sum of the emergency temperature plus 5 °C, explosion-proof electrical fittings are used within the cooling compartment to prevent ignition of flammable vapours from the substances.</p> <p>M4 Thermal insulation and combined mechanical refrigeration system and coolant system, provided that</p> <ol style="list-style-type: none"> 1) an adequate quantity of non-flammable coolant (for example liquid nitrogen or solid carbon dioxide), allowing a reasonable margin for possible delay, is carried or a means of replenishment is assured, 2) the requirements of methods M2 and M3 are complied with. <p>M5 Thermal insulation and dual mechanical refrigeration system, provided that</p> <ol style="list-style-type: none"> 1) apart from the integral power supply unit, the two systems are independent of each other, 2) each system alone is capable of maintaining adequate temperature control, 3) for substances with a flashpoint lower than the sum of the emergency temperature plus 5 °C, explosion-proof electrical fittings are used within the cooling compartment to prevent ignition of flammable vapours from the substances. <p>d) Methods M4 and M5 may be used for all organic peroxides and self-reactive substances.</p> <p>Method M3 may be used for organic peroxides and self-reactive substances of types C, D, E and F and, when the maximum ambient temperature to be expected during carriage does not exceed the control temperature by more than 10 °C, for organic peroxides and self-reactive substances of type B.</p> <p>Method M2 may be used for organic peroxides and self-reactive substances of types C, D, E and F when the maximum ambient temperature to be expected during carriage does not exceed the control temperature by more than 30 °C.</p> <p>Method M1 may be used for organic peroxides and self-reactive substances of types C, D, E, and F when the maximum ambient temperature to be expected during carriage is at least 10 °C below the control temperature.</p> <p>e) Where substances are required to be carried in insulated, refrigerated or mechanically refrigerated vehicles or containers, these vehicles or containers shall comply with the requirements of SANS 1518.</p> <p>f) If substances are contained in protective packagings filled with a coolant, they shall be loaded in closed or sheeted vehicles or closed or sheeted containment units. These closed containment units shall be adequately ventilated. The sheets of these vehicles and containment units shall be of an impermeable and non-combustible material.</p> <p>g) Any control and temperature sensing device in the refrigeration system shall be readily accessible and all the electrical connections shall be weatherproof. The temperature of the air inside the transport unit shall be measured by two independent sensors and the output shall be recorded so that any change in temperature is readily detectable. When substances that have a control temperature of less than 25 °C are carried, the transport unit shall be equipped with visible and audible alarms, powered independently of the refrigeration system and set to operate at or below the control temperature.</p> <p>h) A back-up refrigeration system shall be available.</p>

Table C.2 (concluded)

1	2
P provision	Description
P9	Reserved.
P10	IBCs shall be carried in closed or sheeted vehicles or closed or sheeted containers.
P11	IBCs other than metal or rigid plastics IBCs shall be carried in closed or sheeted vehicles or closed or sheeted containers.
P12	IBCs of type 31HZ2 (see SANS 10233) shall be carried in closed vehicles or containers.
P13	When packed in 5H1, 5L1 or 5 M1 bags (see SANS 10229-1), goods shall be carried in closed vehicles or containers.

C.3 Special B provisions for the carriage of goods transported in bulk

When special B provisions are shown in column 9 of table C.1, the provisions B1 to B14 given in table C.3 shall apply.

Table C.3 — Special B provisions for the carriage of goods transported in bulk

1	2
B provision	Description
B1	Carriage in bulk in closed or sheeted vehicles, in closed containers or in large sheeted containers is permitted.
B2	Carriage in bulk is permitted in closed vehicles with a metal body, in closed metal containers and in sheeted vehicles and sheeted large containers covered with a non-combustible sheet and having a metal body or having floor and walls protected from the load.
B3	Carriage in bulk is permitted in sheeted vehicles and sheeted large containers with adequate ventilation.
B4	Carriage in bulk is permitted in closed or sheeted vehicles with a metal body, and in closed metal containers or in sheeted large metal containers. For UN No. 2008, 2009, 2210, 2545, 2546, 2881, 3189 and 3190, only carriage in bulk of solid waste is permitted.
B5	Carriage in bulk is permitted in specially equipped vehicles and containers. The openings used for loading and unloading shall be capable of being closed hermetically.
B6	Reserved.
B7	Carriage in bulk in closed or sheeted vehicles, in closed containers or in large sheeted containers is permitted only if the substance is in pieces.
B8	Carriage in bulk is permitted as a full load, in closed vehicles, in closed containers or in sheeted vehicles or in large containers covered with an impermeable, non-combustible sheet. Vehicles and containers shall be so constructed that either the substances contained cannot come into contact with wood or any combustible material, or the entire surface of floor and walls, if made of wood or other combustible material, shall be provided with an impermeable surface resistant to combustion, or coated with sodium silicate or a similar substance.
B9a	Carriage in bulk is permitted, as a full load, in sheeted vehicles, in closed containers or in sheeted containers with complete walls. For substances of class 8, the body of the vehicle or container shall be equipped with a suitable and sufficiently stout inner lining.

Table C.3 (concluded)

B9b	Carriage in bulk of full loads (if class 8, only for wastes) is permitted in closed containers or in sheeted large containers with complete walls. For wastes of class 8, containers shall be equipped with a suitable and sufficiently stout inner lining.
B10	Carriage in bulk is permitted as a full load in sheeted vehicles, in closed containers or in sheeted large containers with complete walls. The bodies of vehicles or containers shall be leakproof or rendered leakproof, for example by means of a suitable and sufficiently stout inner lining.
B11	Carriage in bulk is permitted in specially equipped vehicles and containers in a manner which shall avoid risks to humans, animals and the environment, for example by loading the waste into bags through airtight connections.
B12	Substances for which carriage in tank vehicles, portable tanks or in tank containers is unsuitable because of the high temperature and density of the substance may be carried in special vehicles or containers in accordance with standards specified by the competent authority of the country of origin.
B13	Carriage in bulk is permitted in specially equipped vehicles or containers in accordance with standards specified by the competent authority of the country of origin.
B.14	<p>The following provisions shall apply:</p> <ul style="list-style-type: none"> a) Used batteries may be carried in bulk in specially equipped vehicles or containers. Large plastics containers are not permitted. Small plastics containers, when fully loaded and at -18°C, shall be capable of withstanding a drop test from a height of 0,8 m onto a hard surface, without breakage. b) The load compartments of vehicles or containers shall be of material resistant to the corrosive substances contained in the batteries. Less resistant steels may be used when there is a sufficient wall thickness or plastics lining/layer resistant to the corrosive substances. The design of the load compartments of vehicles or containers shall take account of any residual currents and impact from the batteries. c) Constructional precaution measures shall be taken to ensure that there will be no leakage of corrosive substances from the load compartments of vehicles or containers during carriage. Open load compartments shall be covered. The cover shall be resistant to corrosive substances. d) Before loading, the compartments of vehicles or containers, including their equipment, shall be inspected for damage. Vehicles or containers with damaged load compartments shall not be loaded. The load compartments of vehicles or containers shall not be loaded above the top of their walls. e) No batteries that contain different substances and no other goods liable to react dangerously with each other shall be present in the load compartments of vehicles or containers. During carriage no dangerous residue of the corrosive substances contained in the batteries shall adhere to the outer surface of the load compartments of vehicles or containers.
B15	Carriage in bulk is permitted in closed or sheeted vehicles, closed containers or sheeted large containers with complete walls for substances or mixtures (such as preparations or wastes) containing not more than 1 000 mg/kg of substance to which this UN No. is assigned.
B16	For radio-active material (not covered by this standard).
B17	For radio-active material (not covered by this standard).

C.4 Special L provisions for the loading operation

When special L provisions are shown in column 10 of table C.1, the provisions L1 to L28 below shall apply.

Table C.4 — Special L provisions for the loading operation

1	2
L provision	Description
L1	The following operations are prohibited: a) loading or unloading in a public place in a built-up area without special permission from the local competent authority; and b) loading or unloading of goods in a public place elsewhere than in a built-up area unless prior notice thereof has been given to the local competent authority, and unless these operations are urgently necessary for reasons of safety.
L2	Before loading, the loading surface of the vehicle or container shall be thoroughly cleaned.
L3	Explosives shall not be transported with other dangerous goods on the same vehicle. Explosives shall not be conveyed by public transport, except in terms of provision L7(a) and L8(a).
L4	A maximum of 25 kg black powder may be transported in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle when a licensed black powder dealer obtains black powder from a supplier for resale.
L5	A maximum of 250 kg of smokeless powder may be transported by a person to whom a firearm transporter's permit has been issued in terms of the relevant national legislation (see foreword) or by a licensed smokeless powder dealer in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle.
L6	a) Pyrotechnic signals such as flares and smoke devices may be transported under the following circumstances: 1) by bona fide users for emergency signalling, such as boat owners, mountaineers and hikers in any motor vehicle, except public transport, in quantities not exceeding 5 kg; or 2) by licensed dealers in pyrotechnics, in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle in quantities not exceeding 50 kg for class 1.3G articles, and 100 kg for class 1.4G articles. b) Pyrotechnic articles for technical purposes, such as rock breaking cartridges, may be transported by or on behalf of persons or companies authorized by the competent authority, in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle in quantities not exceeding 50 kg for class 1.3G articles, and 100 kg for class 1.4G articles.

Table C.4 (continued)

1	2
L provision	Description
L7	<p>Fireworks may be transported under the following circumstances:</p> <ul style="list-style-type: none"> a) a maximum of 5 kg of class 1.4G or 1.4S consumer fireworks may be conveyed by public transport on condition that it is under the direct control of the owner; b) a maximum of 10 kg of class 1.4G or 1.4S consumer fireworks in any motor vehicle for personal use; c) a maximum of 50 kg of class 1.3G fireworks in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle, for professional use; and d) a maximum of 500 kg of class 1.4G consumer fireworks in the cargo containment area of a light delivery vehicle or other commercial vehicle from a supplier to a licensed fireworks dealer.
L8	<p>Railway track signals may be transported under the following circumstances:</p> <ul style="list-style-type: none"> a) a maximum of 10 units in a container is received from the manufacturer by a train driver, rail track worker, or other person authorized in writing by a railway operator, in any vehicle, including public transport, on condition that it remains under the direct control of such authorized person; and b) a maximum of 50 kg in the cargo containment area of a light delivery vehicle or other commercial delivery vehicle, for distribution between suppliers and distribution depots.
L9	<p>Packages shall not be thrown or subjected to impact. Receptacles shall be so stowed in the vehicle or container that they cannot overturn or fall.</p>
L10	<p>Cylinders shall be laid parallel to or at right angles to the longitudinal axis of the vehicle or container; however, those situated near the forward transverse wall shall be laid at right angles to the said axis.</p> <p>Short cylinders of large diameter (about 30 cm and over) may be stowed longitudinally with their valve-protecting devices directed towards the middle of the vehicle or container.</p> <p>Cylinders which are sufficiently stable or are carried in suitable devices effectively preventing them from overturning may be placed upright.</p> <p>Cylinders which are laid flat shall be securely and appropriately wedged, attached or secured so that they cannot shift.</p>
L11	<p>Packages shall always be orientated in the manner for which they were designed and be protected against any possibility of being damaged by other packages.</p>
L12	<p>When pallets loaded with articles are stacked, each tier of pallets shall be evenly distributed over the lower tier, if necessary, by the interposition of a material of adequate strength.</p>

Table C.4 (continued)

1	2
L provision	Description
L13	If any substance has leaked and spilt in a vehicle or container, the vehicle or container may not be re-used until after it has been thoroughly cleaned and, if necessary, disinfected or decontaminated. Any other goods and articles carried in the same vehicle or container shall be examined for possible contamination.
L14	Goods shall be shielded from direct sunlight and heat during carriage. Packages shall be stored only in cool, well-ventilated places away from heat sources.
L15	The quantity of organic peroxides and self-reactive substances that may be carried in a vehicle or combination of vehicles shall be in accordance with table C.5.
L16 to L20	Reserved
L21	<p>The transport unit shall be thoroughly inspected before loading. Before carriage the operator shall be informed about</p> <p>a) the operation of the refrigeration system, including a list of suppliers of coolant available en route, and</p> <p>b) procedures to be followed in the event of loss of temperature control.</p> <p>In the case of temperature control in accordance with methods M2 or M4 of provision P8 (see C.2), a sufficient quantity of non-flammable refrigerant (for example liquid nitrogen or dry ice), including a reasonable margin for possible delays shall be carried, unless a means of replenishment is assured.</p> <p>Packages shall be so stowed as to be readily accessible.</p> <p>The specified control temperature shall be maintained during the whole transport operation, including loading and unloading, as well as any intermediate stops.</p>
L22	Packages shall be loaded so that a free circulation of air within the loading space provides a uniform temperature of the load. If the contents of one vehicle or large container exceed 5 000 kg of flammable solids or organic peroxides (or both), the load shall be divided into stacks of not more than 5 000 kg separated by air spaces of at least 0,05 m.
L23	When handling packages, special measures shall be taken to ensure that they do not come into contact with water.
L24	Before loading, vehicles and containers shall be thoroughly cleaned and in particular be free of any combustible debris (such as, straw, hay and paper).
L25	<p>Packages shall be so stowed that they are readily accessible.</p> <p>When packages are required to be carried at an ambient temperature of not more than 15 °C or be refrigerated, the temperature shall be maintained when unloading or during storage.</p> <p>Packages shall be stowed only in cool places away from sources of heat.</p>
L26	The wooden parts of a vehicle or container that have come into contact with these substances shall be removed and burnt.

Table C.4 (concluded)

1	2
L provision	Description
L27	Packages shall be so stowed that they are readily accessible. When packages are to be carried refrigerated, the functioning of the cooling chain shall be ensured when unloading or during storage. Packages shall only be stowed in cool places away from sources of heat.
L28	Packages shall not be loaded together with packages known to contain foodstuffs, other articles of consumption or animal feeds.
L29 to L32	Reserved.
L33	For radioactive materials (not covered by this standard).
L34	Prior to carriage of pressure receptacles it shall be ensured that the pressure has not risen due to potential hydrogen generation.
L35	If bags are used as single packagings, they shall be adequately separated to allow for the dissipation of heat.
L36	<p>Packages shall preferably be loaded in open or ventilated vehicles or open or ventilated containers. If this is not feasible and packages are carried in other closed vehicles or containers, the cargo doors of the vehicles or containers shall be marked with the following in letters not less than 25 mm high:</p> <p style="text-align: center;">"WARNING NO VENTILATION OPEN WITH CAUTION"</p> <p>This shall be in a language considered appropriate by the consignor.</p>

Table C.5 — Load limits

1	2	3	4	5	6	7
Organic peroxide or self-reactive substance	Type B without temperature control	Type C without temperature control	Type D, E or F without temperature control	Type B with temperature control	Type C with temperature control	Type D, E, or F with temperature control
maximum quantity in kg	1 000 ^a	10 000	20 000	1 000 ^b	5 000 ^c	20 000
^a 5 000 kg if the loading space is ventilated at the top and if the transport unit is insulated with heat-resistant material. ^b 5 000 kg if the transport unit is insulated with a heat-resistant material. ^c 10 000 kg if the transport unit is insulated with a heat-resistant material.						

C.5 Special O provisions for the transport operation

When special O provisions are shown in column 11 of table C.1, the provisions O1 to O21 given in table C.6 shall apply.

Table C.6 — Special O provisions for the transport operation

1	2
O provision	Description
O1	Explosives shall be transported with all due precautions against theft or accident.
O2	<p>Closed vehicles that carry liquids with a flash point of not more than 60,5 °C or flammable substances or articles of class 2, shall not be entered by persons who carry lighting apparatus other than portable lamps so designed and constructed that they cannot ignite any flammable vapours or gases which may have penetrated into the interior of the vehicle.</p> <p>In the case of vehicles of type F (see SANS 1518), a good electrical connection from the vehicle chassis to earth shall be established before tanks are filled or emptied. In addition, the rate of filling shall be limited.</p>
O3	For transport units that carry substances of class 6.2, the requirements with regard to fire extinguishers shall not apply.
O4	<p>For the carriage of substances under controlled temperature, maintenance of the prescribed temperature is essential for safe carriage. In general, there shall be</p> <ul style="list-style-type: none"> a) a thorough inspection of the transport unit before loading, b) an instruction to the operator about the operation of the refrigeration system, including a list of suppliers of coolant available en route, c) procedures to be followed in the event of loss of control, d) regular monitoring of the operating temperature, and e) availability of a back-up refrigeration system or spare parts. <p>The temperature of the air space within the transport unit shall be measured by two independent sensors and the output shall be so recorded that temperature changes are readily detectable.</p> <p>The temperature shall be logged every four to six hours.</p> <p>If the control temperature is exceeded during carriage, an alert procedure shall be initiated involving any necessary repairs to the refrigeration equipment or an increase in the cooling capacity (e.g. by adding liquid or solid coolant). There shall also be frequent checking of the temperature and preparations for implementation of the emergency procedures. If the emergency temperature is reached, the emergency procedures shall be set in operation.</p>
O5	For radioactive material (not covered by this standard).
O6	For radioactive material (not covered by this standard).
O7	Each member of the vehicle crew shall be provided with a respiratory protective device enabling the crew member to escape when carrying gases or articles classified as toxic, or with a toxic subsidiary risk.
O8	When a transport unit is loaded with more than 2 000 kg of these substances, stops for service requirements shall be as far as possible from inhabited or frequented places. A longer stop near such places is permissible only with the consent of the local emergency services.
O9	During the carriage of these substances, stops for service requirements shall be as far as possible from inhabited or frequented places. A longer stop near such places is permissible only with the consent of the local emergency services.
O10	When the vehicle is stationary, the packages shall be effectively protected against the action of the sun, for example by means of sheets placed not less than 20 cm above the load.

Table C.6 (concluded)

1	2
O provision	Description
O11	For radioactive materials (not covered by this standard).
O12	For radioactive materials (not covered by this standard).
O13	When a consignment cannot be delivered, it shall be placed in a safe place. The emergency services shall be informed as soon as possible and requested for instructions on how to proceed.
O14	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 100 kg.
O15	The provisions in 5.3.4 concerning the supervision of vehicles shall apply to class 4 whatever the mass and to substances of class 3 when the total mass of these substances in the vehicle exceeds 100 kg.
O16	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 500 kg. In addition, vehicles carrying more than 500 kg of these substances shall be subject at all times to supervision for the prevention of any malicious act and to alert the driver and the emergency services in the event of loss or fire.
O17	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 1 000 kg.
O18	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 2 000 kg.
O19	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 5 000 kg.
O20	The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 10 000 kg.
O21	For radioactive materials (not covered by this standard).

Annex D
(normative)

Incident report format

An incident involving the transport of dangerous goods by road shall be reported in the following format (see 4.2.5):

Report on incident involving the road transportation of dangerous goods

Details of incident							
Name of Company (Operator)							
Date and time of incident							
Location of incident							
Brief description							
Cause							
Weather conditions							
Vehicle registration number/s							
Dangerous goods and involved in incident							
UN nos	Class	Packaging Grp	Description	Qty of product loss (kg or L)	Containment type (1)	Containment failure reason (2)	Containment material
(1) Containment type (insert appropriate number in column above)		Packaging	1	Portable tank	5	Small container	9
		Large packaging	2	MEGC	6	Large container	10
		IBC	3	Demountable tank	7	Fixed tank vehicle	11
		Tank container	4	Battery vehicle	8		
(2) Containment failure reason (insert appropriate number in column above)		Explosion	1	Structural failure	3		
		Fire	2	Equipment failure	4		
Consequences of incident							
Fatalities (insert number)				Injuries (insert number)			
Loss of product (Tick)		No	Yes		Imminent risk of loss		
Material/Environmental damage		Level of damage					
Description of loss							
Involvement of authorities		Authorities contacted					
		Action taken by authorities (evacuation, road closure)					
Details of clean-up action taken							
Documentation and placarding compliance-As found							
Dangerous Goods Declaration completed correctly? (Yes/No)							
Correct emergency response documentation in vehicle? (Yes/No)							
Was the correct information obtained from the specialist advice number? (Yes/No)							

Annex E

(normative)

Dangerous goods load compatibility chart and special provisions

E.1 General

Load compatibility and segregation shall be based on the hazard class and subsidiary risk diamonds, displayed on packages and containers. Both the hazard class and any subsidiary risks shall be considered, on an equal basis, in the segregation of cargo. Cargo segregation on mixed load vehicles shall conform to the requirements of the load compatibility chart in table E1 and the special provisions according to hazard class in E.3. Furthermore, cognisance shall be taken of the reactivity of individual substances with each other, even if allowed in accordance with the load compatibility chart in table E.1.

E.2 Load compatibility chart

Table E.1 gives a load compatibility chart in which the following aspects are denoted:

- a) A white empty square indicates permitted mixed loading.
- b) A black shaded square indicates that loading on the same vehicle is prohibited.
- c) "A" indicates that loading on the same vehicle is permitted, but the goods shall be kept at least 1 m apart.

Special provisions according to the hazard class (see E.3) shall be considered in conjunction with the compatibility chart.

Table E.1 — Load compatibility chart

CLASS	1	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8 acid	8 base	
1																
2.1											A	A		A		
2.2														A		
2.3																
3									A	A						
4.1									A	A						
4.2									A	A						
4.3									A	A						
5.1					A	A	A	A								
5.2					A	A	A	A						A		
6.1		A												A		
6.2		A												A		
7																
8 acid		A	A							A	A	A			A	
8 base														A		
9																

E.3 Special provisions according to hazard class

E.3.1 Provision applicable to all classes

Unless otherwise specified, goods of different hazard classes shall be segregated by an air space of at least 100 mm or by an approved segregation device, or non-dangerous goods.

E.3.2 Provision applicable to class 1

Dangerous goods of class 1 may only be transported or conveyed by prior written permission from the competent authority on explosives unless specifically excluded in terms of the relevant national legislation (see foreword).

E.3.3 Provisions applicable to class 2

E.3.3.1 Packages of class 2 shall not be thrown or be subjected to impact.

E.3.3.2 Packages of class 2 shall be so stowed that they cannot roll, fall, or be subjected to impact.

E.3.3.3 When class 2.1 and class 2.3 goods are transported in closed vehicles, sufficient ventilation shall be provided to prevent the build-up of gases.

E.3.3.4 Cylinders of class 2 not standing upright shall not be stowed with their valve-protecting devices facing outwards.

E.3.3.5 Aluminium cylinders shall be kept apart from class 8 bases.

E.3.4 Provision applicable to class 3

If the class 3 substance is nitro-methane, UN No. 1261, it shall not be transported in the same load as substances of hazard class 6.1.

E.3.5 Provisions applicable to class 4

E.3.5.1 A self-reactive substance of class 4.1 shall be shielded from direct sunlight.

E.3.5.2 When self-reactive substances of class 4.1 are transported in vehicles covered with sheets, the sheets shall be of a material that is impermeable and non-combustible.

E.3.5.3 Self-reactive substances of class 4.1 shall be stowed so as to be readily accessible during all stages of transportation and not be stacked on top of other goods.

E.3.5.4 Flammable solids of class 4.1, transported in loads in excess of 5 000 kg, shall be subdivided in stacks of not more than 5 000 kg with a space of at least 500 mm between stacks, or subdivided by non-hazardous goods.

E.3.5.5 Substances of class 4.2 shall be transported in closed vehicles with the containment space constructed of metal.

E.3.5.6 Substances of class 4.3 shall be transported in closed vehicles or in hermetically sealed containers.

E.3.5.7 Contact with water shall be avoided during all stages of transportation of class 4.3 substances, including loading and unloading.

E.3.6 Provisions applicable to class 5

E.3.6.1 For the transportation of class 5.2 peroxides, the cargo containment area shall be constructed entirely of metal and there shall be no exposed wood in or on any part of the cargo.

E.3.6.2 Packages of class 5.2 shall be so stowed as to be readily accessible during all stages of transportation.

E.3.6.3 Substances of class 5.2, transported in loads in excess of 5 000 kg, shall be subdivided in stacks of not more than 5 000 kg with an air space of at least 500 mm between stacks.

E.3.7 Provisions applicable to class 6

E.3.7.1 Substances of class 6.1 shall not be transported together with foodstuffs or stock feeds.

E.3.7.2 Cyanides of class 6.1 shall not be transported together with substances of class 8 acids.

E.3.7.3 Substances of class 6.2 shall not be transported together with foodstuffs or stock feeds.

E.3.7.4 Packages of class 6.2 shall be stowed so that they are readily accessible during all stages of transportation.

E.3.8 Provision applicable to class 7

The transportation, by road, of radioactive material shall be in accordance with the relevant national legislation on radioactive material (see foreword).

E.3.9 Provisions applicable to class 8

E.3.9.1 Concentrated acids and bases in quantities that exceed the exempt quantities shall be kept at least 1 m apart.

E.3.9.2 Substances of class 8 acids shall not be transported together with cyanides of class 6.1.

Annex F

(normative)

Inspection schedules and requirements

NOTE This annex contains the inspection schedules to be applied to vehicles and all types of tanks and applicable product containment structures carried by vehicles.

F.1 Inspection schedule

F.1.1 This schedule governs all inspections to be carried out after the initial inspection of the vehicle, tank or product containment structure as required by the relevant design and construction standard.

F.1.2 The various inspection types are categorized as in table F.1.

Table F.1 — Inspection categories

1	2
Category	Description
Operational inspections	Normal inspections that would be done as part of the in-operation and maintenance inspections and apply to the vehicle and tank/product containment structure.
Intermediate periodic inspection	This term is in keeping with the term used in the <i>European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)</i> and is a subsequent inspection related to the initial inspection and applies to the tank/product containment structure only. It occurs every 2,5 years to 3 years, depending on the tank type.
Major periodic inspection	This term is in keeping with the ADR and is a subsequent inspection related to the initial inspection and applies to the tank/product containment structure only. It occurs every 5 years to 6 years.
Exceptional inspections	Additional inspections required during major structural repair work that would involve all of the elements of an intermediate or periodic inspection or when a previously owned vehicle is procured and deployed in an operation.

F.1.3 Cognisance needs to be taken of the relevant requirements of other applicable statutory requirements that could influence the required inspection schedule.

F.1.4 The schedules and requirements state the minimum requirements.

F.1.5 Intermediate periodic and major periodic inspections may be performed within a period of three months before or after the due date.

However, should the inspection take place more than three months before the due date, the next due periodic inspections will be performed at the required intervals after the date of the actual periodic inspection being carried out.

F.1.6 If an exceptional inspection as referred to in F.7.1.1, covering structural repair or modification of tanks and cargo containment areas that will require verification of adherence to design, construction and material requirements as stated in the applicable standard of construction is carried out, and it includes all the elements of an intermediate periodic inspection or a major periodic inspection, the next periodic inspections will be performed at the required intervals after the date of the actual exceptional inspection being carried out.

F.1.7 The intermediate periodic inspection is applicable to all tanks that fall outside the scope of pressure vessels in terms of the relevant national legislation (see foreword).

For tanks governed by the relevant national legislation (see foreword), the intermediate periodic inspection shall be replaced by a major periodic inspection as given in F.6, and conducted in accordance with the test schedule contained in F.1.1 to F1.6.

Inspection categories, intervals and applicability of such inspections are given in table F.2.

Table F.2 — Inspection categories, intervals and requirements and applicability

1	2	3	4	5
Type	Interval	Relevant clause	Vehicle/Tank type	Performed by
Operational	Daily	F.2	All	Vehicle driver
	Monthly	F.3	All	Competent person
	12-monthly	F.4	All	Competent person
Intermediate periodic	30-monthly	F.5	Tank containers, swap bodies, Portable tanks and Multi-element Gas Containers (MEGCs)	Competent person
	36-monthly	F.5	Fixed tanks, demountable tanks and battery vehicles	Competent person
Major periodic	36-monthly	F.6	All pressure vessels governed by the relevant national legislation (see foreword)	Competent authority
	60-monthly	F.6	Tank containers, swap bodies, portable tanks and MEGCs	Competent authority
	72-monthly	F.6	Fixed tanks, demountable tanks and battery vehicles	Competent authority
Exceptional	As required	F.7	All tanks and product containment structures	Competent authority

Amdt 2

F.2 Daily inspection requirements

F.2.1 This section contains the requirements that shall be included in a typical daily or pre-shift inspection done by the vehicle driver.

F.2.2 The inspection covering the listed items shall be performed, as a minimum, on a daily basis.

F.2.3 The inspection requirements given in table F.3 are not intended to explain how to do the inspection, but to detail the items and areas that need to be inspected. The manner of inspection shall be addressed by means of the appropriate training.

F.2.4 Table F.3 gives the applicable focus area as well as specific items that shall be checked during daily inspection, for presence or availability, operability, condition, security and validity, as applicable, before departure. Any defects found shall be reported before proceeding with the journey.

Table F.3 — Daily inspection requirements

1	2
Focus area	Item
General roadworthiness	All headlights, tail lights, brake lights, indicators, side marker lamps and number plate lamp Windscreen, and wipers Rear-view mirrors Number plates Front white and rear red retro-reflectors, reflective marking tape and chevron Coolant, oil, fuel and other leaks Coolant, oil and fuel levels and security of all caps and closures Driver's seat Starting of vehicle and condition Operation of gauges, in-cab warning devices, clutch and brake pedals, horn and steering play Body damage and loose equipment and fittings that would render the vehicle unsafe Mudguards, spray suppression and side under-run protection Vehicle suspension and axles Tyres, wheel nuts and tyre pressure Service and park brake operation trailer brake and electrical connections Trailer hitches and couplers such as 5th wheels, A-frames, automatic trailer couplers ball-type hitches, A-frames and tow eyes and drawbar turntables Electrical wiring and junctions Truck battery and enclosure
Documentation and legal	License and operator discs Dangerous goods designated space and correct documentation Dangerous goods transportation permit Dangerous goods placards correct Prohibition signs in place as required Specific local requirements met (for example, 80 km/h sign for Botswana, yellow triangle for Mozambique)
Product and cargo containment	Product tank and pipelines for leaks Packaged goods cargo area for signs of leakage Tank and cargo containment structure supports and frames Valve positions and condition Hose stowage and condition Manhole covers Access ladders Tank top spill containment area and drains Loading and discharge adaptors and dust caps Security of metering and pumping equipment and leaks Control enclosures closed and control valves and mechanisms in the correct position Electrical bonding systems Emergency release systems Load body sides Compressed gas stowage Container locks Cargo doors and locks
Loose equipment	Fire extinguishers and stowage (pressure, seals, expiry) Wheel chocks and stowage Warning triangles Spill and first aid kits Personal protection equipment

F.3 Monthly inspection requirements

F.3.1 This section contains the requirements that shall be included in a typical monthly time-driven inspection done during the operational preventive maintenance schedule applied to the vehicle or equipment.

F.3.2 The inspection is not applied strictly on a monthly basis, but shall be done at maximum of six week intervals.

F.3.3 The inspection requirements given in table F.4 are not intended to explain how to do the inspection, but to detail the items and areas that need to be inspected. The manner of inspection shall be addressed by means of the appropriate training.

F.3.4 Table F.4 gives the applicable focus area as well as specific items that shall be checked during daily inspection, for presence or availability, operability, condition, security and validity, as applicable, before departure. Any defects found shall be reported before proceeding with the journey.

F.4 Annual inspection requirements

F.4.1 This section contains the requirements that shall be included in an annual, time-driven inspection done during the operational preventive maintenance schedule applied to the vehicle or equipment. In addition it includes the annual statutory roadworthiness inspection and certification and inspections applicable, in specific, to tanks carrying corrosive products.

F.4.2 The inspection could be done one month prior to the due date or one month after the due date, but the following inspection due date remains at a 12-month interval relevant to the current inspection.

F.4.3 Table F.5 gives the annual inspection requirements. The list of requirements is not intended to explain how to do the inspection, but to detail the items and areas that need to be inspected. The manner of inspection shall be addressed by means of the appropriate training.

F.4.4 Table F.5 gives the applicable focus area as well as specific items that shall be checked during daily inspection, for presence or availability, operability, condition, security and validity, as applicable, before departure. Any defects found shall be reported before proceeding with the journey.

NOTE The certificate of roadworthiness (COR) for a dangerous goods vehicle is obtained during the annual inspection due window.

Table F.4 — Monthly inspection requirements

1	2
Focus area	Item
General roadworthiness	All headlights, tail lights, brake lights, indicators, side marker lamps and number plate lamp Windscreen, and wipers Rear-view mirrors Number plates Front white and rear red retro-reflectors, reflective marking tape and chevron Coolant, oil, fuel and other leaks Coolant, oil and fuel levels and security of all caps and closures Driver' seat Starting of vehicle and condition Vehicle transmission, retarder and propeller shaft Operation of gauges, in-cab warning devices, clutch and brake pedals, horn and steering play Body damage and loose equipment and fittings that would render the vehicle unsafe Mudguards, spray suppression and side under-run protection Vehicle suspension and axles Tyres, wheel nuts and tyre pressure Service and park brake operation trailer brake and electrical connections Trailer hitches and couplers such as 5th wheels, A-frames, automatic trailer couplers ball-type hitches drawbar turntables Electrical wiring and junctions Truck battery and enclosure
Documentation and legal	License and operator discs Dangerous goods designated space and correct documentation Dangerous goods transportation permit Prohibition signs in place as required Specific local requirements met (e.g. 80 km/h sign for Botswana, yellow triangle for Mozambique)
Product and cargo containment	Product tank and pipelines for leaks Chemical degradation and attack Packaged goods cargo area for signs of leakage Tank and cargo containment structure supports and frames Valves and gaskets Hose stowage and condition Manhole covers Access ladders Tank top spill containment area and drains Loading and discharge adaptor dust caps Metering and pumping equipment and leaks Control enclosures and control valves and mechanisms Electrical bonding systems Emergency release systems Load body sides Compressed gas stowage Container locks Cargo doors and locks
Loose equipment	Fire extinguishers and stowage (pressure, seals, expiry) Wheel chocks and stowage Warning triangles
Tests	Overfill prevention systems Hose continuity Electrical bonding system continuity Measurement of wear tolerances on trailer coupling systems including 5th wheels, kingpins, automatic trailer couplers, ball type couplers, A-frames and tow eyes and drawbar trailer turntables Road test of vehicle and brake system Tests and inspections required by vehicle applicable manufacturer Tests and inspections required by applicable equipment manufacturers

Table F.5 — Annual inspection requirements

1	2
Focus area	Item
General roadworthiness	All items as included in F.3.
Documentation and legal	All items as included in F.3.
Product and cargo containment	All items as included in F.3.
Loose equipment	All items as included in F.3.
Tests	All items as included in F.3.
Statutory roadworthiness test	In accordance with the relevant national legislation (see foreword). In order to comply with the 11 to 13 month window in which this inspection needs to take place, the statutory roadworthiness inspection shall be obtained within the first month before, and 1 month after, the inspection due date window.
Material thickness inspection for corrosive product tankers	Perform internal inspection. Perform random material thickness tests on tanker shell and ends. Perform pressure test on tank to maximum operating pressure. Certify for continued use in accordance with applicable design and construction standards.

F.5 Intermediate periodic inspection and test

F.5.1 This section contains the requirements for the inspections and tests applicable to the tank and associated equipment conducted on a periodic basis after the initial inspection and test.

F.5.2 The inspection shall be performed in accordance with the intervals specified in F.1.

F.5.3 The intermediate periodic inspection shall be applicable only to tanks not regarded as pressure vessels by the relevant national legislation (see foreword).

Tanks governed by the relevant national legislation (see foreword) shall undergo a major periodic inspection as given in F.6, in accordance with the schedule given in F.1.

F.5.4 The construction reference in table F.6 only includes the references to that latest revision of SANS 1518. Actual tests conducted shall take cognisance of the actual original construction date and relevant standard of construction at the time of construction (or as upgraded as allowed by SANS 1518). Tests shall be carried out in accordance with the requirements stated in the construction standard applicable to the specific tank or cargo containment area, or equipment being inspected and tested, in accordance with the intervals as stated in this standard.

F.5.5 The inspection and test requirements are contained in table F.6.

Table F.6 — Intermediate periodic inspection and test

1 Tank type	2 Construction reference	3 Inspection requirements
Fixed tanks, demountable tanks and battery vehicles tank containers, swap bodies, portable tanks and multiple-element gas containers (MEGCs)	SANS 1518:2011, annex A (table A.1) A-6-6.7 (ADR 6.7) A-6-6.8 (ADR 6.8)	<p>Perform an external visual inspection</p> <p>Perform a leakproof test at an internal pressure at least equal to the maximum working pressure. For tanks intended for the carriage of liquids or solids in a granular or powdery state, and when a gas is used to perform the leakproof test, it shall be carried out at a pressure at least equal to 25 % of the maximum working pressure. In all cases, the test pressure shall not be less than 20 kPa.</p> <p>For tanks equipped with venting systems and a safety device to prevent product spilling out if the tank overturns, the test pressure shall be equal to the static pressure of the product carried at the maximum fill level.</p> <p>The leakproof test shall be carried out separately on each compartment of a compartmented shell.</p> <p>The pressure tests on the tank shall be performed with all equipment in place. Only vents and pressure relief systems may be blocked off to ensure that the appropriate test pressures are attained.</p> <p>Visually inspect all tank related equipment and ensure correct operation thereof.</p>
FRP fixed tanks, demountable tanks and battery vehicles tank containers, swap bodies and portable tanks vacuum operated waste tanks	SANS 1518: 2011, annex A (table A.1) A-6-6.9 (ADR 6.9) A-6-6.10 (ADR 6.10)	<p>Perform an external and internal visual inspection.</p> <p>Perform a leakproof test at an internal pressure at least equal to the maximum working pressure. For tanks intended for the carriage of liquids or solids in a granular or powdery state, and when a gas is used to perform the leakproof test, it shall be carried out at a pressure at least equal to 25 % of the maximum working pressure. In all cases, the test pressure shall not be less than 20 kPa.</p> <p>For tanks equipped with venting systems and a safety device to prevent product spilling out if the tank overturns, the test pressure shall be equal to the static pressure of the product carried at the maximum fill level.</p> <p>The leakproof test shall be carried out separately on each compartment of a compartmented shell.</p> <p>The pressure tests on the tank shall be performed with all equipment in place. Only vents and pressure relief systems may be blocked off to ensure that the appropriate test pressures are attained</p> <p>Visually inspect all tank related equipment and ensure correct operation thereof.</p>
Bulk containers	SANS 1518:2011, annex A (table A.1) A-6-6.11(ADR 6.11)	Testing and maintenance performed in accordance with the International Convention for Safe Containers (CSC).

F.6 Major periodic inspection and test

F.6.1 This section contains the requirements for the inspections and tests applicable to the tank and associated equipment conducted on a periodic basis after the initial inspection and test.

F.6.2 The inspection is performed in accordance with the intervals specified in F.1.

F.6.3 The construction reference given in table F.7 only includes the references to the latest revision of SANS 1518. Actual tests conducted need to take cognisance of the actual original construction date and relevant standard of construction at the time of construction (or as upgraded as allowed by SANS 1518). Therefore tests shall be carried out in accordance with the requirements stated in the construction standard applicable to the specific tank or cargo containment area, or equipment being inspected and tested, in accordance with the intervals as stated in this standard.

F.6.4 The inspection and test requirements are given in table F.7.

Table F.7 — Major periodic inspection and test

1	2	3
Tank type	Construction reference	Inspection requirements
Fixed tanks, demountable tanks and battery vehicles tank containers, swap bodies, portable tanks and multiple-element gas containers (MEGCs)	SANS 1518:2011, annex A (table A.1) A-6-6.7 (ADR 6.7) A-6-6.8 (ADR 6.8)	Perform an external and internal visual inspection. Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the characteristics of the shell. Perform a hydraulic pressure test at the test pressure indicated on the tank. The hydraulic pressure test shall be carried out separately on each compartment of a compartmented shell. The pressure tests on the tank shall be performed with all equipment in place. Only vents and pressure relief systems may be blocked off to ensure that the appropriate test pressures are attained. Visually inspect all tank related equipment and ensure correct operation thereof.
FRP Fixed tanks, demountable tanks and battery vehicles tank containers, swap bodies and portable tanks vacuum operated waste tanks	SANS 1518:2011, annex A (table A.1) A-6-6.9 (ADR 6.9) A-6-6.10 (ADR 6.10)	Perform an external and internal visual inspection. Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the characteristics of the shell. Perform a hydraulic pressure test at the test pressure indicated on the tank. The hydraulic pressure test shall be carried out separately on each compartment of a compartmented shell. The pressure tests on the tank shall be performed with all equipment in place. Only vents and pressure relief systems may be blocked off to ensure that the appropriate test pressures are attained. Visually inspect all tank related equipment and ensure correct operation thereof.
Bulk containers	SANS 1518:2011, annex A (table A.1) A-6-6.11(ADR 6.11)	Testing and maintenance performed in accordance with the International Convention for Safe Containers (CSC)

F.7 Exceptional inspection and test

F.7.1 The requirements for additional inspections and tests are as follows:

- a) During major structural repair or modification work that would involve all of the elements of an intermediate or periodic inspection, or when a previously owned vehicle is procured and deployed in an operation.
- b) Actual tests conducted need to take cognisance of the actual original construction date and relevant standard of construction at the time of construction (or as upgraded, in accordance with SANS 1518). Tests shall be carried out in accordance with the requirements stated in the construction standard applicable to the specific tank or cargo containment area, or equipment being inspected and tested.

F.7.2 The inspection and test requirements are given in table F.8

Table F.8 — Exceptional inspection and test

1	2	3
Activity	Inspection and test requirements	Responsibility
<p>Structural repair or modification of tanks and cargo containment areas that will require verification of adherence to design, construction and material requirements as stated in the applicable standard of construction.</p>	<p>Perform an external and internal visual inspection in the affected areas. Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the characteristics of the shell.</p> <p>Perform a hydraulic pressure test for the affected areas at the test pressure indicated on the tank. The hydraulic pressure test shall be carried out separately on each compartment of a compartmented shell. The pressure tests on the tank shall be performed with all equipment in place. Only vents and pressure relief systems may be blocked off to ensure that the appropriate test pressures are attained.</p> <p>Inspect the quality management system documentation of the organization responsible for the work to ensure compliance with material, design and construction requirements. This will include areas such as:</p> <ul style="list-style-type: none"> Material certification Non-destructive testing Welding qualification Design approval <p>Inspect service equipment repaired, replaced or added during the work done for compliance with the requirements of the applicable standard of construction and compliance with the individual equipment standards. This will include:</p> <p>Inspection of manhole covers, vapour vents, bottom outlet valves, loading adaptors, hoses, emergency pressure vents, pressure relief equipment and pressure and vacuum vents.</p>	<p>Competent authority</p>

Table F.8 (continued)

1	2	3
Activity	Inspection and test requirements	Responsibility
	<p>Ensuring correct installation and operation of such equipment.</p> <p>Ensuring that all necessary equipment compliance documentation such as test certificates are available</p> <p>Inspect general vehicle constructional compliance in relation to the areas repaired or modified in terms of the applicable standard of construction. This will include items such as:</p> <ul style="list-style-type: none"> Electrical installations Mudguards Spray suppression Under-run protection devices Drive away interlocks Ladders and steps Pipelines Vapour recovery systems Overfill prevention systems Fire extinguishers Spill containment areas Electrical bonding Tank plating 	
<p>Placing of previously owned fixed tank vehicles, demountable tanks and battery vehicles tank containers, swap bodies, portable tanks, multiple-element gas containers (MEGCs) and vacuum operated tanks in operation</p>	<p>Inspect service equipment fitted for compliance with the requirements of the applicable standard of construction and compliance with the individual equipment standards. This will include:</p> <ul style="list-style-type: none"> Inspection of manhole covers, vapour vents, bottom outlet valves, loading adaptors, hoses, emergency pressure vents, pressure relief equipment and pressure and vacuum vents. <p>Inspection of such service equipment for correct installation and operation of such equipment.</p> <p>Inspect for general vehicle constructional compliance in terms of the applicable standard of construction. This will include items such as:</p> <ul style="list-style-type: none"> Electrical installations Mudguards Spray suppression Under-run protection devices Drive away interlocks Ladders and steps Pipelines Vapour recovery systems Overfill prevention systems Fire extinguishers Spill containment areas Electrical bonding Tank plating 	<p>Competent authority</p>

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Table F.8 (concluded)

1	2	3
Activity	Inspection and test requirements	Responsibility
	Inspection of documentation to ensure that the following documentation is in place: Initial construction manufacturer's certificate and third party approvals. Intermediate periodic inspection, major periodic inspection and exceptional inspection documentation.	

Bibliography

Standards

SANS 10263-0, *The warehousing of dangerous goods – Part 0: General requirements.*

SANS 10263-2, *The warehousing of dangerous goods – Part 2: The storage and handling of gas cylinders.*

SANS 10263-5, *The warehousing of dangerous goods – Part 5: The storage and handling of oxidizing substances.*

SANS 10263-8, *The warehousing of dangerous goods – Part 8: The storage and handling of corrosive substances.*

Other publications

IATA Dangerous Goods Regulations.

International Maritime Dangerous Goods Code (IMDG code) London: International Maritime Organization.

UN Recommendations on the Transport of Dangerous Goods – Model Regulations.
