

International Civil Aviation Organization

DGP/23-WP/54 21/8/11

WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-THIRD MEETING

Montréal, 11 to 21 October 2011

Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for* the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2013-2014 Edition

DANGEROUS GOODS NOT SUBJECT TO ALL OF THE REQUIREMENTS OF THE TECHNICAL INSTRUCTIONS

(Presented by G. A. Leach)

SUMMARY

This working paper seeks to clarify a number of areas in the Technical Instructions which refer to dangerous goods which are not subject to all of the requirements of the Instructions.

Action by the DGP: Based on the work undertaken at DGP-WG/11, the DGP is invited to consider amendments to the Technical Instructions as presented in the Appendix.

1. **INTRODUCTION**

1.1 At the DGP Working Group of the Whole Meetings in Abu Dhabi (DGP-WG/10, 7 to 11 November 2010) and Atlantic City (DGP-WG/11, 4 to 8 April 2011) (DGP/23-WP/2, paragraph 3.2.3 and DGP/23-WP/3, paragraph 3.2.1 refer) the issue of dangerous goods which are not subject to all of the requirements of the Technical Instructions (e.g. by way of a special provision) was raised. At DGP-WG/11 (DGP/23-WP/3, paragraph 3.2.1 refers), an ad-hoc working group considered each of the occasions where this occurs and the views of that group are appended to this working paper. Whilst agreement was reached in the majority of instances, a few remain outstanding, specifically:

- a) Part 2;6.3.2.3.6 in respect of patient specimens;
- b) to add a provision in Part 8 to enable passengers to carry permeation devices;
- c) Special Provision A122 regarding nitrocellulose membrane filters; and

d) whether to add a provision to Part 8 to enable passengers to carry animal specimens meeting Special Provision A180:

1.2 It is suggested that the issues above be discussed further by the ad-hoc working group during DGP/23.

DGP/23-WP/54 Appendix A

APPENDIX A

AMENDMENTS TO THE TECHNICAL INSTRUCTIONS

1. Amend Special Provision A32 as follows:

A32 Air bag inflators..... which are not capable of inadvertent activation are not subject to these Instructions when carried as cargo. The words "not restricted.....

2. Amend Special Provision A41 as follows:

A41 Permeation devices are not subject to these Instructions when carried as cargo provided the following

3. Amend the first paragraph of Special Provision A47 as follows:

A47 (219) Genetically modified micro-organisms (GMMOs) are not subject to any other requirements in these Instructions when carried as cargo.

4. Amend Special Provision A67 as follows:

A67 Non-spillable batteries meeting the requirements of Packing Instruction 872 are not subject to these Instructions when carried as cargo if, at a temperature of 55°C......"

In addition to amending Special Provision A67 it was agreed that the passenger and crew exceptions of Part 8 should provide for non-spillable batteries meeting that Special Provision. It is suggested the addition to Part 8;1.1.2 of the following "Consumer article" would address the issue:

with the approval of the operator(s), non-spillable batteries which comply with Special Provision A67, other than those referred to in e). When contained in equipment the operator must ensure that such equipment is carried in such a manner so as to prevent unintentional activation and that it is protected from being damaged by the movement of baggage, mail, stores or other cargo.

Whilst this reflects the view of the ad-hoc working group, the Panel may wish to consider additional restrictions (e.g. size limitation) on such batteries because, as written, the text would provided for numerous devices which had been considered before and excluded by the wording used in 8;1.1.2 e).

5. Amend Special Provision A70 as follows:

......Flammable gas powered internal combustion or fuel cell engines...... are not subject to these Instructions <u>when</u> <u>carried as cargo</u> provided that....

6. Amend Special Provision A98 as follows:

A98 Aerosols, gas cartridges and receptacles.....are not subject to these Instructions<u>when carried as cargo</u> unless their release.....

7. Amend Special Provision A114 as follows:

A114 (283) Articles, containing gas, are not subject to these Instructions when carried as cargo provided.....

8. Amend Special Provision A129 as follows:

A129 (252) Provided the ammonium nitrate remains in solution are not subject to these Instructions when carried as cargo.

9. Amend Part 3;5.1.1 as follows:

5.1.1 Excepted quantities of dangerous goods of certain classes, other than articles, meeting the provisions of this chapter are not subject to any other provisions of these Instructions except for:

• • •

f) the loading restriction in 7;2.1; and

g) the reporting requirements of dangerous goods accidents, incidents and other occurrences in 7;4.4 and 7;4.5-, ; and

h) the prohibition of dangerous goods in baggage in 8;1.1.

10. Amend the "Note" at the end of the provisions for closed cryogenic receptacles in Packing Instruction 202 as follows:

Note.— Insulated packagings containing refrigerated liquid nitrogen fully absorbed in a porous material are not subject to these Instructions <u>when carried as cargo</u> provided they meet the requirements of Special Provision A152.

In addition to amending Packing Instruction 202 it was agreed that the passenger and crew exceptions of Part 8 should provide for such insulated packagings. It is suggested the addition to Part 8;1.1.2 of the following "Consumer article" would address the issue:

Insulated packagings containing refrigerated liquid nitrogen fully absorbed in a porous material provided they meet the requirements of Special Provision A152.

11. Amend Packing Instruction 953 as follows:

Magnetized materials with field strengths causing a compass deflection of more than 2 degrees at a distance of 2.1 m but not more than 2 degrees are not subject to any other requirements in these Instructions when carried as cargo except for the following:

12. Amend Part 5;3.5.2.2 as follows:

Packages containing lithium batteries that meet the requirements of Section II of packed according to Packing Instructions 965 to 970-that are not subject to other additional requirements of these Instructions must bear....

13. Amend the "Note" at the end of Part 7;4.4 as follows:

Note.— This includes incidents involving dangerous goods that are not subject to all or part of the<u>se</u> Technical Instructions through the application......

DGP/23-WP/54 Appendix B

APPENDIX B

| Reference in TI | Text | Comments |
|-----------------------------|--|-------------------------------------|
| Part 3 | 1.3.1 A mixture or solution is <u>not subject to</u> | Classification – no action |
| | these Instructions if the characteristics, | required |
| <u>Chapter 1</u> Concern | properties, form or physical state of | required |
| General | the mixture or solution are such that it does | |
| | not meet the criteria, including human | |
| | experience criteria, for inclusion in any | |
| | class. | |
| Character 2 | 2.2.2 Gases of Division 2.2 are not subject | Classification – no action |
| <u>Chapter 2</u> | | |
| Class 2 Gasses | to these Instructions if they are transported | required |
| | at a pressure less than 200 kPa at 20°C and | |
| | are not liquefied or refrigerated liquefied | |
| | gases. + 2.2.3 Gases of Division 2.2 are not | |
| | subject to these Instructions when | |
| | contained in the following: | |
| | a) foodstuffs, including carbonated | |
| | beverages (except UN 1950); | |
| | b) balls intended for use in sports; | |
| | c) tyres which meet the provisions of | |
| | Special Provision A59; or | |
| | d) light bulbs, provided they are packaged | |
| | so that the projectile effects of any rupture | |
| | of the bulb will be contained within the | |
| | package. | |
| 3. UN numbers and Proper | 3.7 A mixture or solution containing one or | Classification – no action |
| shipping names | more substances identified by name in | required |
| | Table 3-1 or classified under an n.o.s. | |
| | entry and one or more substances not | |
| | subject to these Instructions is not subject | |
| | to these Instructions if the hazard | |
| | characteristics of the mixture or solution | |
| | are such that they do not meet the criteria | |
| | (including human experience criteria) for | |
| | any | |
| | class. | |
| Chapter 6 | 6.3.2.3.1 Substances which do not contain | Classification – no action |
| 6.3.2 Classification of | infectious substances or substances which | required |
| infectious substances | are unlikely to cause disease in humans or | |
| infectious substances | animals are not subject to these Instructions | |
| | unless they meet the criteria for inclusion | |
| | in another class | |
| | 6.3.2.3.2 Substances containing micro- | Classification – no action |
| | organisms which are non-pathogenic to | required |
| | humans or animals are not subject to these | requireu |
| | <u>Instructions</u> unless they meet the criteria | |
| | for inclusion in another class. | |
| | 6.3.2.3.3 Substances in a form that any | Classification no action required |
| | | Classification – no action required |
| | present pathogens have been neutralized or | |
| | inactivated such that they no longer pose a | |
| | health risk are not subject to these | |
| | Instructions unless they meet the criteria | |
| | for inclusion in another class. | |

| Reference in TI | Text | Comments |
|--|--|---|
| | 6.3.2.3.4 Environmental samples (including food and water samples) which | Classification – no action required |
| | are not considered to pose a significant risk of infection are not subject to these | |
| | <u>Instructions</u> unless they meet the criteria for inclusion in another class. | |
| | 6.3.2.3.5 Dried blood spots, collected by applying a drop of blood onto absorbent material, or faecal occult blood screening tests and blood or blood components that have been collected for the purposes of transfusion or for the preparation of blood products to be used for transfusion or transplantation and any tissues or organs intended for use in transplantation <u>are not subject to these</u> <u>Instructions</u> | Classification – no action required |
| 6.3.2 Classification of | 6.3.2.3.6 Patient specimens for which there | Add "when carried as cargo" |
| 6.3.3 Biological products | is minimal likelihood that pathogens are present <u>are not subject to these Instructions</u> if the specimen is transported in a packaging which will prevent any leakage and which is marked with the words "Exempt human specimen" or "Exempt animal specimen", as appropriate. The packaging must meet the following conditions: a) The packaging must consist of three components: i) a leakproof primary receptacle(s); 6.3.5.3 Decontaminated medical or clinical wastes that previously contained infectious substances <u>are not subject to these</u> <u>Instructions</u> unless they meet the criteria | WG/11 decision – place in square brackets pending further discussion at DGP Classification – no action required |
| Class 9 — Miscellaneous Dangerous Substance and Articles, including Environmentally Hazardous Substances | for inclusion in another class. \neq c) GMMOs or GMOs which do not meet the definition of toxic substances (see 6.2) or infectious substances (see 6.3) must be assigned to UN 3245. GMMOs or GMOs are not subject to these Instructions when when the size of formula the approximation. | No action required? Appropriate national authorities can determine whether carriage in baggage is appropriate |
| 9.2 Assignment to class 9 | authorized for use by the appropriate national authorities of the States of Origin, transit and destination. Genetically modified live animals must be transported under terms and conditions of the appropriate national authorities of the States of Origin and destination. | WG/11 decision <u>–</u> agreed |

no

action

| B-3 | | Арреі |
|--|----------------------------|-------|
| Text | Comments | |
| A3 (223) If the chemical or physical properties of a substance covered by this description are such that, when tested, it does not meet the established defining criteria for the class or division listed in column 3, or any other class or division, it is not subject to these Instructions. | Classification required | _ |
| | | |

| Adhesives containing flammable Liquid |
|---|
| 1133 3 |
| Air bag inflators † 0503 1.4G |
| Air bag inflators † 3268 9 |
| Air bag modules † 0503 1.4G A32 |
| Air bag modules † 3268 9 |
| Alcohols, n.o.s.* 1987 3 |
| Alcohols, flammable, toxic, n.o.s.* 1986 |
| 3 6.1 |
| Aldehydes, n.o.s.* 1989 3 |
| Aldehydes, flammable, toxic, n.o.s.* |
| 1988 3 6.1 |
| Alkali metal alcoholates, self- heating, |
| corrosive, n.o.s.* |
| 3206 4.2 |
| Alkaline earth metal alcoholates, |
| n.o.s. *3205 4.2 |
| Alkaloid salts, liquid, n.o.s.* 3140 6.1 |
| Alkaloid salts, solid, n.o.s.* 1544 6.1 |
| Alkaloids, liquid, n.o.s.* 3140 6.1 |
| Alkaloids, solid, n.o.s.* 1544 6.1 |
| Alkylphenols, liquid, n.o.s. 3145 8 |
| (including C2-C12 homologues) |
| Alkylphenols, solid, n.o.s. 2430 8 |
| (including C2-C12 homologues) |
| Aluminium bromide solution 2580 8 |
| Aluminium chloride solution 2581 8 |
| Aluminium powder, coated † 1309 4.1 |
| Aluminium powder, uncoated † 1396 |
| 4.3 |
| Aluminium remelting by-products 3170 |
| 4.3 |
| Aluminium smelting by-products 3170 |
| 4.3 |
| |
| Aluminium silicon powder, uncoated |
| Aluminium silicon powder, uncoated 1398 4.3 Amines, flammable, corrosive, |
| 1398 4.3 Amines, flammable, corrosive, |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic flammable*, flash point not less than 23°c 2993 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic flammable*, flash point not less than |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic* 1734 flammable*, flash point not less than 23°c 2993 6.1 Arsenic compound, liquid, n.o.s.*, 1556 6.1 |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic* 1556 6.1 inorganic, including: Arsenates, n.o.s.; |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic flammable*, flash point not less than 23°c 2993 6.1 Arsenic compound, liquid, n.o.s.*, 1556 6.1 inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; |
| 1398 4.3 Amines, flammable, corrosive, n.o.s.* 2733 3 Amines, liquid, corrosive, n.o.s.* 2735 8 Amines, solid, corrosive, n.o.s.* 3259 8 Ammonium dinitro-o-cresolate solution 3424 6.1 Ammonium hydrogendifluoride solution 2817 8 Ammonium polysulphide solution 2818 8 Amylamine 1106 3 Antimony pentachloride solution 1731 8 Arsenical pesticide, liquid, toxic* 2994 6.1 Arsenical pesticide, liquid, toxic* 1556 6.1 inorganic, including: Arsenates, n.o.s.; |

1557 6.1

Reference in TI

Table 3-2. Special provisionsAcrylamide solution 3426 6.1Adhesives containing flammable Liquid

| Reference in TI | Text | Comments |
|--|------|----------|
| inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides | | |
| rusennes, n.o.s., and rusenne sulpindes | | |
| | | |
| Table 3-2. Special provisions Parison allocations | A3 | |
| Barium chlorate solution 3405 5.1 6.1 Barium compound, n.o.s.* 1564 6.1 | | |
| Barium perchlorate solution 3406 5.1 | | |
| 6.1 Beryllium compound, n.o.s.* 1566 6.1 | | |
| Bipyridilium pesticide, liquid, toxic* 3016 6.1 | | |
| Bipyridilium pesticide, liquid, 3015 6.1 | | |
| toxic, flammable*, flash point not less than 23°C | | |
| Bipyridilium pesticide, solid, toxic* 2781 6.1 | | |
| Bisulphates, aqueous solution 2837 8 | | |
| Bromates, inorganic, aqueous 3213 $\overline{5.1}$ | | |
| solution, n.o.s.* | | |
| Bromoacetic acid solution 1938 8 Bromopropanes 2344 3 | | |
| Butanols 1120 3 | | |
| B Butyl nitrites 2351 3 | | |
| Butyl acetates 1123 3 # Cadmium compound* 2570 6.1 | | |
| Caesium hydroxide solution 2681 8 | | |
| Calcium chlorate, aqueous solution 2429 5.1 | | |
| # Calcium hypochlorite, hydrated 2880 | | |
| 5.1 with not less than 5.5% but not more than 16% water | | |
| # Calcium hypochlorite, hydrated 2880 | | |
| 5.1 mixture with not less than 5.5% but | | |
| not more than 16% water | | |
| Calcium silicide 1405 4.3 | | |
| Carbamate pesticide, liquid, toxic* 2992 6.1 | | |
| Carbamate pesticide, liquid, toxic, 2991 6.1 | | |
| flammable*, flash point not less than | | |
| 23°C 3 Carbamate pesticide, solid, toxic* 2757 | | |
| 6.1 | | |
| Carbon , animal or vegetable origin 1361 4.2 | | |
| Carbon, activated 1362 4.2 | | |
| Caustic alkali liquid, n.o.s.* 1719 8 Celluloid, in blocks, rods, rolls, 2000 4.1 | | |
| sheets, tubes, etc. (except scrap) | | |
| Celluloid, scrap 2002 4.2 | | |
| Chlorate and borate mixture 1458 5.1 Chlorate and magnesium chloride 1459 | | |
| 5.1 | | |
| mixture, solid Chlorate and magnesium chloride 3407 | | |
| 5.1 | | |
| mixture solution | | |
| Chlorates, inorganic, aqueous 3210 $\overline{5.1}$ | | |
| solution, n.o.s.* | | |

| Reference in TI | Text | Comments |
|--|------|----------|
| Chlorite solution 1908 8 | | |
| Chlorocresols solution 2669 6.1 | | |
| Chloropicrin mixture, n.o.s.* 1583 6.1 | | |
| 2 -Chloropropionic acid 2511 8 | | |
| 4-Chloro-o-toluidine hydrochloride | | |
| 3410 6.1 | | |
| Solution | | |
| Chromic acid solution 1755 8 | | |
| Chromic fluoride solution 1757 8 | | |
| Coal tar distillates, flammable 1136 3 | | |
| Coating solution (includes surface 1139 | | |
| 3 | | |
| treatments or coatings used for industrial | | |
| or other purposes such as vehicle | | |
| undercoating, drum or barrel | | |
| lining) † | | |
| Copper based pesticide, liquid, 3010 6.1 | | |
| Toxic | | |
| Copper based pesticide, solid, 2775 6.1 | | |
| toxic* | | |
| Corrosive liquid, n.o.s.* 1760 8 | | |
| Corrosive liquid, acidic, inorganic, | | |
| 3264 8 n.o.s. * | | |
| Corrosive liquid, acidic, organic, 3265 8 | | |
| n.o.s.* | | |
| Corrosive liquid, basic, inorganic, 3266 | | |
| 8 n.o.s.* | | |
| Corrosive liquid, basic, organic, 3267 8 | | |
| n.o.s.* | | |
| Corrosive liquid, toxic, n.o.s.* 2922 8 | | |
| 6.1 | | |
| Corrosive solid, n.o.s.* 1759 8 | | |
| Corrosive solid, acidic, inorganic, 3260 | | |
| 8 n.o.s.* | | |
| Corrosive solid, acidic, organic, 3261 8 | | |
| n.o.s.* Corrosive solid, basic, inorganic, 3262 8 | | |
| n.o.s.* | | |
| Corrosive solid, basic, organic, 3263 8 | | |
| n.o.s.* | | |
| Corrosive solid, toxic, n.o.s.* 2923 8 6.1 | | |
| Courarin derivative pesticide, 3026 6.1 | | |
| liquid, toxic* | | |
| Coumarin derivative pesticide, 3025 6.1 | | |
| liquid, toxic, flammable*, flash point not | | |
| less than 23°C 3 | | |
| Coumarin derivative pesticide, 3027 6.1 | | |
| solid, toxic* | | |
| Cupriethylenediamine solution 1761 8 | | |
| 6.1 | | |
| Cyanides, inorganic, solid, n.o.s.* 1588 | | |
| 6.1 | | |
| _ Cyanide solution, n.o.s.* 1935 6.1 | | |
| Diacetone alcohol 1148 3 | | |
| Dibromochloropropanes 2872 6.1 | | |
| Dichloropropenes 2047 3 | | |
| Diesel fuel 1202 3 | | |
| Dimethyldioxanes 2707 3 | | |
| Dinitrobenzenes, liquid 1597 6.1 | | |
| Dinitrophenol solution 1599 6.1 | | |
| Disinfectant, liquid, corrosive, | | |
| n.o.s. *1903 8 | | |
| Disinfectant, liquid, toxic, n.o.s.* 3142 | | |
| | | |

| Reference in TI | Text | Comments |
|--|------|----------|
| 6.1 | | |
| Disinfectant, solid, toxic, n.o.s.* 1601 | | |
| 6.1 | | |
| Dye intermediate, liquid, 2801 8 | | |
| corrosive, n.o.s.* † | | |
| Dye intermediate, liquid, toxic, 1602 6.1 n.o.s.* † | | |
| Dye intermediate, solid, corrosive, 3147 | | |
| 8 n.o.s.* † | | |
| Dye intermediate, solid, toxic, 3143 6.1 | | |
| n.o.s.* † | | |
| Dye, liquid, corrosive, n.o.s.* 2801 8 Dye, liquid, toxic, n.o.s.* 1602 6.1 | | |
| Dye, solid, corrosive, n.o.s.* 3147 8 | | |
| Dye, solid, toxic, n.o.s.* 3143 6.1 | | |
| Esters, n.o.s.* 3272 3 | | |
| _ Ethanol 1170 3 Ethanolamine 2491 8 | | |
| Ethanolamine 2491 8 Ethanolamine solution 2491 8 | | |
| Ethanol solution 1170 3 | | |
| Ethers , n.o.s. * 3271 3 | | |
| _ Ethyl alcohol 1170 3 | | |
| Ethyl alcohol solution 1170 3 Extracts, aromatic, liquid † 1169 3 | | |
| Extracts, flavouring, liquid † 1109 5 | | |
| Ferric chloride solution 2582 8 | | |
| Ferrosilicon with 30% or more but 1408 | | |
| 4.3 | | |
| less than 90% silicon 6.1 Ferrous metal borings in a form 2793 | | |
| 4.2 | | |
| liable to self-heating | | |
| Ferrous metal cuttings in a form 2793 | | |
| | | |
| liable to self-heating Ferrous metal shavings in a form 2793 | | |
| 4.2 | | |
| liable to self-heating | | |
| Ferrous metal turnings in a form 2793 | | |
| 4.2 liable to self-heating | | |
| Flammable liquid, n.o.s.* 1993 3 | | |
| Flammable liquid, corrosive, 2924 3 | | |
| n.o.s.* | | |
| Flammable liquid, toxic, n.o.s.* 1992 3 | | |
| 6. Flammable liquid, toxic, corrosive, | | |
| 3286 3 | | |
| n.o.s.* 6.1 8 | | |
| Flammable solid, corrosive, 3180 4.1 inorganic, n.o.s.* | | |
| Flammable solid, corrosive, 2925 4.1 | | |
| organic, n.o.s.* | | |
| Flammable solid, inorganic, n.o.s.* | | |
| 3178 4.1 | | |
| Flammable solid, organic, n.o.s.* 1325 4.1 | | |
| Flammable solid, organic, molten, 3176 | | |
| 4.1 | | |
| n.o.s.* | | |
| Flammable solid, oxidizing, n.o.s.* 3097 4.1 5.1 | | |
| Flammable solid, toxic, inorganic, 3179 | | |
| 4.1 n.o.s. * | | |
| Flammable solid, toxic, organic, 2926 | | |

| Reference in TI | Text | Comments |
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| 4.1 n.o.s.* | | |
| Fuel, aviation, turbine engine 1863 3 | | |
| Fusel oil 1201 3 | | |
| Gas oil 1202 3 Hafnium noudan dry 2545 4 2 | | |
| Hafnium powder, dry 2545 4.2 Hafnium powder, wetted with not 1326 | | |
| 4.1 | | |
| less than 25% water (a visible excess of | | |
| water must be present) (a) mechanically | | |
| produced, particle size less than 53 microns; (b) chemically produced, | | |
| particle size less than 840 microns | | |
| Heating oil, light 1202 3 | | |
| Hexamethylenediamine solution 1783 8 | | |
| Hydrazine, aqueous solution with | | |
| 2030 8 more than 27% hydroxing by mass 6.1 | | |
| more than 37% hydrazine by mass 6.1 Hydrazine, aqueous solution with 3293 | | |
| 6.1 | | |
| not more than 37% hydrazine, by mass | | |
| Hydriodic acid 1787 8 | | |
| Hydrobromic acid , not more than 1788 8 49% strength | | |
| Hydrocarbons, liquid, n.o.s. 3295 3 | | |
| Hydrochloric acid 1789 8 | | |
| Hydrogendifluorides, solid, n.o.s. 1740 | | |
| 8 | | |
| Hypochlorite solution † 1791 8 Iron oxide, spent † (obtained from 1376 | | |
| 4.2 | | |
| coal gas purification) | | |
| Iron sponge, spent † (obtained from | | |
| 1376 4.2 | | |
| coal gas purification) Isocyanates, flammable, toxic, 2478 3 | | |
| n.o.s.* † | | |
| Isocyanate solution, flammable, 2478 3 | | |
| toxic, n.o.s.* † 6.1 | | |
| Isocyanate solution, toxic, 2206 6.1 n.o.s.* | | |
| Isocyanates, toxic, n.o.s.* 2206 6.1 | | |
| Ketones, liquid, n.o.s. * 1224 3 | | |
| Lead perchlorate solution 3408 5.1 6.1 | | |
| Lead phosphite, dibasic 2989 4.1 | | |
| Lithium hydroxide solution 2679 8 Lithium hypochlorite, dry 1471 5.1 | | |
| Lithium hypochlorite mixture 1471 | | |
| 5.1 | | |
| Magnesium alloys powder 1418 4.3 4.2 | | |
| Magnesium powder 1418 4.3 4.2 Maneb 2210 4.2 4.3 | | |
| Maneb preparation with not less 2210 | | |
| 4.2 | | |
| than 60% maneb 4.3 | | |
| Maneb preparation, stabilized 2968 4.3 | | |
| against self-heating Maneb stabilized against self- 2968 4.3 | | |
| heating | | |
| Medicine, liquid, flammable, toxic, | | |
| 3248 3 | | |
| n.o.s. 6.1 Madiaina liquid tavia n.a.s. 1851.6.1 | | |
| - Medicine, liquid, toxic, n.o.s. 1851 6.1 Medicine, solid, toxic, n.o.s. 3249 6.1 | | |
| _ municine, sonu, toxic, ii.o.s. 5249 0.1 | | |

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|---|------|----------|
| _ Mercaptan mixture, liquid, 3336 3 | | |
| flammable, n.o.s.* Mercaptan mixture, liquid, 1228 3 | | |
| flammable, toxic, n.o.s.* 6.1 | | |
| _ Mercaptans, liquid, flammable, 3336 | | |
| 3 n.o.s.* Mercaptans, liquid, flammable, 1228 3 | | |
| toxic, n.o.s.* | | |
| Mercury based pesticide, liquid, 3012 | | |
| 6.1 toxic* Mercury based pesticide, liquid, 3011 | | |
| 6.1 | | |
| toxic, flammable*, flash point not less than 23°C | | |
| Mercury based pesticide, solid, 2777 6.1 | | |
| toxic* | | |
| Mercury compound, liquid, n.o.s.* 2024 6.1 | | |
| _ Mercury compound, solid, n.o.s.* | | |
| 2025 6.1 Matel contanula liquid n e e * 2281 (1 | | |
| Metal carbonyls, liquid, n.o.s.* 3281 6.1 Metal carbonyls, solid, n.o.s.* 3466 6.1 | | |
| _ Metal catalyst, dry* 2881 4.2 | | |
| Metal hydrides, flammable, n.o.s.* 3182 4.1 | | |
| Metallic substance, water-reactive, | | |
| 3208 4.3 n.o.s. * | | |
| Metallic substance, water-reactive, 3209 4.3 | | |
| self-heating, n.o.s.*4.2 | | |
| Metal powder, flammable, n.o.s. 3089 | | |
| 4.1 Metal powder, self-heating, n.o.s.* 3189 | | |
| 4.2 | | |
| Metal salts of organic compounds, 3181 4.1 | | |
| flammable, n.o.s. | | |
| beta-Naphthylamine solution 3411 6.1 Nicotine compound, liquid, n.o.s.* | | |
| <u>3144 6.1</u> | | |
| Nicotine compound, solid, n.o.s.* | | |
| 1655 6.1 Nicotine hydrochloride, liquid 1656 6.1 | | |
| Nicotine hydrochloride solution 1656 | | |
| 6.1 _ Nicotine preparation, liquid, n.o.s.* | | |
| _ Nicoune preparation, liquid, n.o.s.^ 3144 6.1 | | |
| _ Nicotine preparation, solid, n.o.s.* | | |
| 1655 6.1 Nicotine sulphate, solid | | |
| Nicotine sulphate solution 1658 6.1 | | |
| Nitrates, inorganic, n.o.s. 1477 5.1 | | |
| Nitrates, inorganic, aqueous 3218 5.1 solution, n.o.s. | | |
| Nitriles, toxic, liquid, n.o.s.* 3276 6.1 | | |
| Nitriles, toxic, solid, n.o.s.* 3439 6.1 Nitrites, inorganic, n.o.s.* 2627 5.1 | | |
| _ Nitrites, inorganic, aqueous 3219 5.1 | | |
| solution, n.o.s.* | | |
| Nitrocellulose solution, flammable 2059 | | |
| with not more than 12.6% nitrogen, | | |
| by dry mass, and not more than 55% nitrocellulose | | |
| Nitromethane 1261 3 | | |
| | l | |

| Organic pigments, self-heating 3313 4.2 Organostenic compound, liquid, 3280 Organostenic compound, solid, 3465 6.1 n.s.* Organostenic compound, solid, 3465 6.1 n.s.* Organostenic compound, solid, 2996 6.1 toxic Organostenic compound, toxic, 2996 6.1 toxic Organostenic compound, toxic, 3282 6.1 figuid, n.s.* Organometalic compound, toxic, 3467 6.1 solid, n.s.* Organometalic substance, liquid, 3399 4.3 water reactive* Organometalic substance, solid, 3400 4.2 self-heating* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3397 4.3 water reactive* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3396 4.3 water reactive* Organometalic substance, solid, 3397 4.3 water reactive* Organophosphorus compound, 3278 (b) (c) (c) (c) (c) (c) (c) (c) (c | Reference in TI | Text | Comments |
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| Organorstalic substance, liquid, 320 Organorstalic substance, solid, 3465 (a) no.s.* Organorstalic substance, solid, 3207 (b) notice (c) notice | | | |
| Organoschorine pesticide, liquid, 2996 6.1 nos.* Organoschorine pesticide, solid, 2995 6.1 oxice Biguid, nos.* Organoschorine pesticide, solid, 2761 6.1 oxice Organoschorine pesticide, solid, 2761 6.1 oxice Organoschorine pesticide, solid, 3467 6.1 Biguid, nos.* Organoschorine compound, toxic, 3467 6.1 Biguid, nos.* Organoschallis substance, solid, 3399 4.3 water reactive, flammable* Organoschallis substance, solid, 3395 4.3 water reactive, flammable* Organoschallis substance, solid, 3396 4.3 water reactive, flammable* Organoschallis substance, solid, 3397 4.3 water reactive, flammable* Organoschallis substance, solid, 3397 4.3 water reactive, flammable* Organoschallis substance, solid, 3397 4.3 water reactive, flammable* Organosphosphorus compound, 3278 4.3 water reactive, flammable* Organosphosphorus pesticide, 2018 6.1 nos.* Organosphosphorus pesticide, 1004, toxie, 3020 6.1 Organosphosphorus pesticide, 1004, toxie, 3020 6.1 Organosphosphorus pesticide, 1004, toxie, 3020 6.1 Organosphosphorus pesticide, 1004, toxie, 3020 6.1 Organosphosphorus pesticide, 2018 6.1 nos.* | Organoarsenic compound, liquid, 3280 | | |
| 6.1 no.s* Organochome pesticide, liquid, 2996 6.1 toxic Organochome pesticide, solid, 2995 6.1 toxic, flammable*, flash point not less than 23°C Organochome pesticide, solid, 2761 6.1 toxic* Organochalic compound, toxic, 3262 6.1 flquid, no.s.* Organometallic substance, liquid, 3398 4.3 water reactive* Organometallic substance, solid, 3400 4.2 vater reactive; flammable* Organometallic substance, solid, 3400 4.2 vater reactive; flammable* Organometallic substance, solid, 3395 4.3 water reactive; flammable* Organometallic substance, solid, 3397 4.3 water reactive; flammable* Organometallic substance, solid, 3397 6.1 toxic, liquid, no.s.* Organophosphorus compound, 3278 6.1 solid, no.s.* Organophosphorus pesticide, 2018 6.1 no.s.* Organophosphorus pesticide, 2018 6.1 no.s.* Organophosphorus pesticide, 2018 6.1 no.s.* Organophosphorus pesticide, 2018 6.1 no.s.* Organophosphorus pesticide, 2018 6.1 no.s.* | | | |
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| 6.1 čosče Organechlorine pestičide, liquid, 2995 6.1 tosče, flammable*, flash point not less than 23°C Organometallic compound, tosče, 3282 6.1 liquid, no.s.* Organometallic compound, tosče, 3467 6.1 solid, no.s.* Organometallic substance, liquid, 3398 4.3 water reactive.* Organometallic substance, liquid, 3399 4.3 water reactive.* Organometallic substance, solid, 3400 4.2 solf-heating* Organometallic substance, solid, 3400 4.3 water reactive.* Organometallic substance, solid, 3395 4.3 water reactive.* Organometallic substance, solid, 3396 4.3 water reactive.* Organoptosphorus compound, 3278 6.1 tosče, solid, no.s.* Organoptosphorus compound, 3464 6.1 tosče, solid, no.s.* Organoptosphorus pesticide, 3018 6.1 judid, tosče* Organoptosphorus pesticide, 2783 6.1 solid, toxče* Organoptosphorus pesticide, 1044, toxče* 3020 6.1 Organoptosphorus pesticide, solid, toxče* 2786 | | | |
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| txic, flammable*, flash point not less than 23°C Organoetallic compound, txic, 3282 6.1 fujdi, nos.* Organometallic compound, txic, 3467 6.1 solid, nos.* Organometallic substance, liquid, 3398 4.3 water reactive* Organometallic substance, solid, 3400 4.2 ext-fracting* Organometallic substance, solid, 3400 4.3 water reactive Organometallic substance, solid, 3395 4.3 water reactive Organometallic substance, solid, 3395 4.3 water reactive Organometallic substance, solid, 3395 4.3 water reactive Organometallic substance, solid, 3395 4.3 water reactive Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organometallic substance, solid, 3397 6.1 txic, liquid, nos.* Organophosphorus compound, 3278 6.1 txic, solid, nos.* Organophosphorus pesticide, 3018 6.1 liquid, txic* Organophosphorus pesticide, 2783 6.1 solid, txic* Organophosphorus pesticide, 2783 6.1 nos.* Organophosphorus pesticide, 2783 6.1 solid, txic* Organophosphorus pesticide, 2783 6.1 nos.* Organophosphorus pesticide, 2783 6.1 nos.* Organophosphorus pesticide, 2783 6.1 nos.* | | | |
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| 6.1 fuquid, n.o.s.* Organometallic compound, toxic, 3467 6.1 solid, n.o.s.* Organometallic substance, liquid, 3398 4.3 water reactive Organometallic substance, solid, 3400 4.2 self-heating* Organometallic substance, solid, 3395 4.3 water reactive, flammable* Organometallic substance, solid, 3395 4.3 water reactive, flammable* Organometallic substance, solid, 3396 4.3 water reactive, flammable* Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organometallic substance, solid, 3397 6.1 toxic, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organophosphorus pesticide, 1018 6.1 no.s.* Organotin compound, solid, 3146 6.1 no.s.* Organotin pesticide, liquid, toxic* Organotin pesticide, liquid, toxic* Organotin pesticide, solid, toxic* 2786 | | | |
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| solid, no.s.* Organometallic substance, liquid, 3398 4.3 water reactive, flammable* Organometallic substance, solid, 3400 4.2 self-heating* Organometallic substance, solid, 3395 4.3 water reactive, flammable* Organometallic substance, solid, 3396 4.3 water reactive, flammable* Organometallic substance, solid, 3396 4.3 water reactive, flammable* Organometallic substance, solid, 3397 4.3 water reactive, self-heating* 4.2 Organophosphorus compound, 3278 6.1 toxic, liquid, no.s.* Organophosphorus compound, 3464 6.1 toxic, solid, no.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxie* Organophosphorus pesticide, 2783 6.1 solid, toxie* Organophosphorus pesticide, 1278 6.1 no.s.* Organotin compound, solid, 3146 6.1 no.s.* Organotin pesticide, liquid, toxie, 3020 6.1 Organotin pesticide, liquid, toxie, 3020 6.1 Organotin pesticide, liquid, toxie, 3020 6.1 Organotin pesticide, solid, toxie, 2786 | | | |
| 4.3 water reactive. ⁴ Organometallic substance, liquid, 3399 4.3 water reactive, flammable* Organometallic substance, solid, 3400 4.2 self-heating* Organometallic substance, solid, 3395 4.3 water reactive. ⁴ Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organophosphorus compound, 3278 6.1 toxic, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic * 3020 6.1 Organotin pesticide, liquid, toxic, 3019 6.1 Grammable*, flash point not less than 23°C | | | |
| vater reactive* Organometallic substance, liquid, 3399 4.3 water reactive, flammable* Organometallic substance, solid, 3395 4.3 water reactive* Organometallic substance, solid, 3396 4.3 water reactive, flammable* Organometallic substance, solid, 3397 4.3 water reactive, self-heating* 4.2 Organophosphorus compound, 3278 6.1 toxic, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus perficide, 3018 6.1 liquid, toxic* Organophosphorus perficide, 3017 6.1 liquid, toxic; flammable*, flash point not less than 23°C Organophosphorus perficide, 2783 6.1 solid, toxic* Organophosphorus perficide, 3018 6.1 n.o.s.* Organophosphorus perficide, 3018 6.1 solid, toxic; flammable*, flash point not less than 23°C Organophosphorus perficide, 3018 6.1 n.o.s.* Organophosphorus perficide, 3018 6.1 n.o.s.* Organophosphorus perficide, 3028 6.1 n.o.s.* Organophosphorus perficide, 3028 6.1 n.o.s.* | | | |
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| 4.3 water reactive, flammable* Organometallic substance, solid, 3400 4.2 self-heating* Organometallic substance, solid, 3395 4.3 water reactive* Organometallic substance, solid, 3397 4.3 water reactive, flammable* Organophosphorus compound, 3278 6.1 toxie, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxie, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxie* Organophosphorus pesticide, 3018 6.1 liquid, toxie* Organophosphorus pesticide, 3017 6.1 liquid, toxie* Organophosphorus pesticide, 2783 6.1 solid, toxie* Organophosphorus pesticide, 2783 6.1 solid, toxie* Organoin compound, solid, 3146 6.1 n.o.s.* Organoin pesticide, liquid, toxie, 3020 6.1 Organoin pesticide, liquid, toxie, 2786 Organoin pesticide, liquid, toxie, 3020 6.1 Organoin pesticide, liquid, toxie, 3020 6.1 Organoin pesticide, liquid, toxie, 3020 6.1 Organoin pesticide, liquid, toxie, 3020 6.1 Organoin pesticide, solid, toxie 4 2786 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | |
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| 4.2 self-heating* Organometallic substance, solid, 3395 4.3 water reactive * Organometallic substance, solid, 3396 4.3 water reactive, flammable* Organophosphorus compound, 3278 6.1 toxic, ilquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic * Organophosphorus pesticide, 3018 6.1 liquid, toxic * Organophosphorus pesticide, 3017 6.1 liquid, toxic * Organophosphorus pesticide, 3017 6.1 liquid, toxic * Organophosphorus pesticide, 2783 6.1 solid, toxic * Organophosphorus pesticide, 2783 6.1 solid, toxic * Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic * 3020 6.1 Organotin pesticide, liquid, toxic * 3020 6.1 Granotin pesticide, liquid, toxic * 2786 | | | |
| self-heating* Organometallic substance, solid, 3395 4.3 water reactive.* Organometallic substance, solid, 3397 4.3 water reactive, self-heating* 4.2 Organophosphorus compound, 3278 6.1 toxic, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic.* Organophosphorus pesticide, 3018 6.1 liquid, toxic.* Organophosphorus pesticide, 3017 6.1 liquid, toxic.* Organophosphorus pesticide, 3017 6.1 solid, toxic.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic * 3020 6.1 Grganotin pesticide, solid, toxic * 2786 | | | |
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| 4.3 water reactive, flammable* Organophosphorus compound, 3278 6.1 toxic, liquid, n.o.s.* Organophosphorus compound, 3464 6.1 toxic, solid, n.o.s.* Organophosphorus pesticide, 3018 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 3017 6.1 liquid, toxic* Organophosphorus pesticide, 2783 6.1 solid, toxic* Organotin compound, liquid, 2788 6.1 n.o.s.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic* 3020 6.1 Organotin pesticide, liquid, toxic, 3019 6.1 flammable*, flash point not less than 23°C | | | |
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| Organophosphorus pesticide, 3017 6.1 liquid, toxic, flammable*, flash point not less than 23°C Organophosphorus pesticide, 2783 6.1 solid, toxic* Organotin compound, liquid, 2788 6.1 n.o.s.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic* 3020 6.1 flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | | | |
| point not less than 23°C Organophosphorus pesticide, 2783 6.1 solid, toxic* Organotin compound, liquid, 2788 6.1 n.o.s.* Organotin compound, solid, 3146 6.1 n.o.s.* Organotin pesticide, liquid, toxic* 3020 6.1 Organotin pesticide, liquid, toxic, 3019 6.1 flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | Organophosphorus pesticide, 3017 6.1 | | |
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| n.o.s.* Organotin pesticide, liquid, toxic* 3020 6.1 Organotin pesticide, liquid, toxic, 3019 6.1 flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | | | |
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| 6.1 Organotin pesticide, liquid, toxic, 3019 6.1 flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | | | |
| 6.1 flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | 3 1 1 1 | | |
| flammable*, flash point not less than 23°C Organotin pesticide, solid, toxic* 2786 | | | |
| 23°C Organotin pesticide, solid, toxic* 2786 | | | |
| Organotin pesticide, solid, toxic* 2786 | | | |
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| | | | |

B-10

| Reference in TI | Text | Comments |
|---|------|----------|
| Oxidizing liquid, n.o.s.* 3139 5.1 | | |
| Oxidizing liquid, corrosive, n.o.s.* 3098 | | |
| 5.18 | | |
| Oxidizing liquid, toxic, n.o.s.* 3099 5.1 | | |
| 6.1 | | |
| Oxidizing solid, n.o.s.* 1479 5.1 | | |
| Oxidizing solid, corrosive, n.o.s.* 3085 | | |
| 5.1 8 Oxidizing solid, toxic, n.o.s.* 3087 5.1 | | |
| 6.1 | | |
| Paint (including paint, lacquer, 1263 3 | | |
| enamel, stain, shellac, varnish, polish, | | |
| liquid filler and liquid lacquer base) | | |
| Paint (including paint, lacquer, 3066 8 | | |
| enamel, stain, shellac, varnish, polish, | | |
| liquid filler and liquid lacquer base) | | |
| Paint, flammable, corrosive 3469 3 | | |
| (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and | | |
| liquid lacquer base) 8 | | |
| Paint related material (including 1263 3 | | |
| paint thinning or reducing compound) | | |
| Paint related material (including 3066 8 | | |
| paint thinning or reducing compound) | | |
| Paint related material, flammable, 3469 | | |
| 3 | | |
| corrosive (including paint thinning or | | |
| reducing compound) 8 Pentanols 1105 3 | | |
| Perchlorates, inorganic, n.o.s. 1481 5.1 | | |
| Perchlorates, inorganic, aqueous 3211 | | |
| 5.1 | | |
| solution, n.o.s. | | |
| _ Perfumery products with flammable | | |
| 1266 3 | | |
| solvents | | |
| Permanganates, inorganic, n.o.s.* 1482 5.1 | | |
| Peroxides, inorganic, n.o.s. 1483 5.1 | | |
| Pesticide, liquid, toxic, n.o.s. * 2902 6.1 | | |
| Pesticide, liquid, toxic, flammable, 2903 | | |
| 6.1 | | |
| n.o.s.* , flash point not less than 23°C | | |
| Pesticide, solid, toxic, n.o.s.* 2588 6.1 | | |
| Petroleum crude oil 1267 3 | | |
| Petroleum distillates, n.o.s. 1268 3 Petroleum products, n.o.s. 1268 3 | | |
| Petroleum products, n.o.s. 1268 3 Phenol solution 2821 6.1 | | |
| Phenoxyacetic acid derivative 3348 6.1 | | |
| pesticide, liquid, toxic* | | |
| Phenoxyacetic acid derivative 3347 6.1 | | |
| pesticide, liquid, toxic, | | |
| flammable*, flash point not less than | | |
| 23°C | | |
| Phenoxyacetic acid derivative 3345 6.1 pesticide, solid, toxic | | |
| Phenylmercuric compound, n.o.s.* | | |
| 2026 6.1 | | |
| Phosphoric acid, solution 1805 8 | | |
| Plastics moulding compound in 3314 9 | | |
| dough, sheet or extruded rope form | | |
| evolving flammable vapour | | |
| Polyamines, flammable, corrosive, 2733 | | |
| 3 n.o.s. Polyaminas liquid corrective 2725 8 | | |
| Polyamines, liquid, corrosive, 2735 8 | | |

| Reference in TI | Text | Comments |
|---|------|----------|
| n.o.s. | | |
| Polyamines, solid, corrosive, 3259 8 | | |
| n.o.s.* | | |
| Polymeric beads, expandable , 2211 9 evolving flammable vapour † | | |
| Potassium chlorate, aqueous 2427 5.1 | | |
| solution | | |
| Potassium cyanide solution 3413 6.1 | | |
| Potassium fluoride solution 3422 6.1 | | |
| Potassium hydrogendifluoride 3421 8 | | |
| Solution 6.1 Potassium hydroxide solution 1814 8 | | |
| Printing ink, flammable 1210 3 | | |
| Printing ink related material 1210 3 | | |
| (including printing ink thinning or | | |
| reducing compound), flammable | | |
| n-Propanol 1274 3 | | |
| Propyl alcohol, normal 1274 3 Pyrethroid pesticide, liquid, toxic* 3352 | | |
| 6.1 | | |
| Pyrethroid pesticide, liquid, toxic, 3351 | | |
| 6.1 | | |
| flammable*, flash point not less than | | |
| 23°C Pyrethroid pesticide, solid, toxic* 3349 | | |
| 6.1 | | |
| Resin solution , flammable 1866 3 | | |
| Rosin oil 1286 3 | | |
| Rubber scrap, powdered or 1345 4.1 | | |
| granulated, not exceeding 840 microns | | |
| and rubber content exceeding 45% Rubber shoddy , powdered or 1345 4.1 | | |
| granulated, not exceeding 840 microns | | |
| and rubber content exceeding 45% | | |
| Rubber solution 1287 3 | | |
| Rubidium hydroxide solution 2677 8 | | |
| _ Selenium compound, liquid, 3440 6.1 | | |
| n.o.s.* Selenium compound, solid, n.o.s.* | | |
| <u>3283</u> 6.1 | | |
| Self-heating liquid, corrosive, 3188 4.2 | | |
| inorganic, n.o.s.* | | |
| Self-heating liquid, corrosive, 3185 4.2 | | |
| organic, n.o.s.* Solf besting liquid inorgania 2186 4.2 | | |
| Self-heating liquid, inorganic, 3186 4.2 n.o.s.* | | |
| Self-heating liquid, organic, n.o.s.* | | |
| 3183 4.2 | | |
| | | |
| Self-heating liquid, toxic, 3187 4.2 inorganic, n.o.s.* 6.1 | | |
| Self-heating solid, corrosive, 3126 4.2 | | |
| organic, n.o.s.* | | |
| Self-heating solid, inorganic, 3190 4.2 | | |
| n.o.s.* | | |
| Self-heating solid, organic, n.o.s.* 3088 | | |
| 4.2 Self-heating solid, oxidizing, 3127 4.2 | | |
| n.o.s.* | | |
| Self-heating solid, toxic, 3191 4.2 | | |
| inorganic, n.o.s.* 6.1 | | |
| Self-heating solid, toxic, organic, 3128 | | |
| 4.2 n.o.s.* 6.1 | | |

DGP/23-WP/54 Appendix B

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| Reference in TI | Text | Comments |
|---|------|----------|
| Shale oil 1288 3 | | |
| Sodium aluminate solution 1819 8 | | |
| Sodium arsenite, aqueous 1686 6.1 | | |
| solution | | |
| Sodium borohydride and sodium 3320 | | |
| bydroxide solution , with not more than | | |
| 12% sodium borohydride and not more | | |
| than 40% sodium hydroxide, by mass | | |
| Sodium chlorate, aqueous 2428 5.1 | | |
| Solution | | |
| Sodium cyanide solution 3414 6.1 | | |
| Sodium fluoride solution 3415 6.1 | | |
| Sodium hydroxide solution 1824 8 Sodium methylate solution in 1289 3 | | |
| Alcohol 8 | | |
| Substituted nitrophenol pesticide, 3014 | | |
| 6.1 | | |
| liquid, toxic* | | |
| Substituted nitrophenol pesticide, 3013 | | |
| 6.1 liquid toxic flammable* flash point pot | | |
| liquid, toxic, flammable *, flash point not less than 23°C | | |
| Substituted nitrophenol pesticide, 2779 | | |
| 6.1 solid, toxic* | | |
| _ Tars, liquid, including road oils, and | | |
| 1999 3 | | |
| cutback bitumens | | |
| Tellurium compound, n.o.s.* 3284 6.1 Tetramethylammonium hydroxide | | |
| 1835.8 | | |
| solution | | |
| Thiocarbamate pesticide, liquid, 3006 | | |
| 6.1 toxic* | | |
| Thiocarbamate pesticide, solid, 2771 | | |
| 6.1 toxic* Thiourea dioxide 3341 4.2 | | |
| Tinctures, medicinal 1293 3 | | |
| Titanium powder, dry 2546 4.2 | | |
| Titanium powder, wetted with not 1352 | | |
| 4.1 | | |
| less than 25% water (a visible excess of | | |
| water must be present) (a) mechanically | | |
| produced, particle size less than 53 microns; (b) chemically produced, | | |
| particle size less than 840 microns | | |
| Titanium sponge granules 2878 4. | | |
| Titanium sponge powders 2878 4.1 | | |
| Corrosive liquid, acidic, inorganic, | | |
| n.o.s. Titanium trichloride mixture 2869 8 A3 | | |
| 2.4-Toluylenediamine solution 3418 6.1 | | |
| Toxic liquid, inorganic, n.o.s.* 3287 6.1 | | |
| Toxic liquid, organic, n.o.s. * 2810 6.1 | | |
| Toxic solid, inorganic, n.o.s.* 3288 6.1 | | |
| Toxic solid, organic, n.o.s.* 2811 6.1 | | |
| Toxins, extracted from living 3172 6.1 | | |
| sources, liquid, n.o.s.* Toxins, extracted from living 3462 6.1 | | |
| sources, solid, n.o.s. | | |
| Triazine pesticide, liquid, toxic* 2998 | | |
| 6.1 | | |
| Triazine pesticide, liquid, toxic, 2997 | | |
| 6.1 | | |
| flammable*, flash point not less than | | |

| Reference in TI | Text | Comments |
|--|---|--------------------------------|
| | ICAU | Comments |
| 23°C 3 Trianing posticide collid topict 2762 (1 | | |
| Triazine pesticide, solid, toxic* 2763 6.1 Trichloroacetic acid solution 2564 8 | | |
| Triisopropyl borate 2616 3 | | |
| Trimethylamine, aqueous solution, | | |
| 1297 3 | | |
| not more than 50% trimethylamine, by | | |
| mass 8 | | |
| Tripropylene 2057 3 | | |
| Tris-(1-aziridinyl) phosphine oxide | | |
| 2501 6.1 solution | | |
| _ Vanadium compound, n.o.s.* 3285 | | |
| 6.1 | | |
| Water-reactive liquid, n.o.s.* 3148 4.3 | | |
| Water-reactive liquid, corrosive, 3129 | | |
| 4.3 n.o.s.* Water repetive liquid toxic n e s * | | |
| Water-reactive liquid, toxic, n.o.s.* 3130 4.3 6.1 | | |
| Water-reactive solid, n.o.s.* 2813 4.3 | | |
| A3 | | |
| Water-reactive solid, corrosive, 3131 | | |
| 4.3 n.o.s. * 8 | | |
| Water-reactive solid, flammable, 3132 | | |
| 4.3 n.o.s.* 4.1 | | |
| Water-reactive solid, oxidizing, 3133 | | |
| 4.3 n.o.s.* 5.1 | | |
| Water-reactive solid, self-heating, 3135 | | |
| 4.3 n.o.s.* 4.2 | | |
| Water-reactive solid, toxic, n.o.s.* 3134 | | |
| 4.3 6.1 Wood preservatives, liquid 1306 3 | | |
| Xanthates 3342 4.2 | | |
| Xylenes 1307 3 | | |
| Zinc ashes 1435 4.3 | | |
| Zinc chloride solution 1840 8 | | |
| Zinc dust 1436 4.3 4.2 | | |
| Zinc powder 1436 4.3 4.2 | | |
| Zirconium, dry, finished sheets, 2009 | | |
| 4.2 | | |
| strip or coiled wire (thinner than 18 | | |
| microns) | | |
| Zirconium powder, dry 2008 4.2 Zirconium scrap 1932 4.2 A2 | | |
| Zirconium scrap 1932 4.2 A2 Zirconium suspended in a 1308 3 | | |
| flammable liquid † | | |
| Alcoholic beverages containing 3065 3 | A9 Alcoholic beverages containing not | Already clarified that applies |
| more than 24% but not more than | more than 70 per cent alcohol by | only "when carried as cargo" |
| 70% alcohol by volume | volume, when packed in receptacles of 5 | only when carried as cargo |
| | | |
| | litres or less, <u>are not subject to these</u> | |
| | Instructions when carried as cargo. | <u>a</u> |
| Ferrosilicon with 30% or more but 1408 | A10 (39) This substance is not subject to | Classification – no action |
| 4.3 loss than 0.0% ciliaan | these Instructions when it contains less | required |
| less than 90% silicon 6.1 | than 30 per cent or not less than 90 | |
| 0.1 | per cent silicon | |

| Reference in TI | Text | Comments |
|---|---|-----------------------------|
| Table3-2.Special | A11 (305) These substances are not subject | Classification – no action |
| provisions – cont; | to these Instructions when in concentrations | required |
| Polychlorinated biphenyls, liquid | of not more than 50 mg/kg. | - |
| 2315 9 | | |
| Polychlorinated biphenyls, solid | | |
| 3432 9 | | |
| Polyhalogenated biphenyls, liquid | | |
| 3151 9 | | |
| Polyhalogenated biphenyls, solid | | |
| 3152 9 | | |
| Polyhalogenated terphenyls, liquid | | |
| 3151 9 | | |
| Polyhalogenated terphenyls, solid | | |
| 3152 9 | | |
| # Antimony compound, inorganic, | A12 (45) Antimony sulphides and oxides | Classification – no action |
| 3141 6.1 liquid, n.o.s. | which contain not more than 0.5 per cent of | required |
| # Antimony compound, inorganic, | arsenic calculated on the total mass <u>are not</u> | |
| 1549 6.1 solid, n.o.s.* | subject to these Instructions. | |
| Cyanides, inorganic, solid, n.o.s.* | A13 (47) Ferricyanides and ferrocyanides | Classification – no action |
| 1588 6.1 | are not subject to these Instructions | required |
| Soda lime with more than 4% 1907 8 | A16 (62) This substance is not subject to | Classification – no action |
| sodium hydroxide † | these Instructions when it does not contain | required |
| | more than 4 per cent sodium hydroxide | |
| # Mercury compound, liquid, n.o.s.* | A18 (66) Mercurous chloride and cinnabar | Classification – no action |
| 2024 6.1 | are not subject to these Instructions. | required |
| <pre># Mercury compound, solid, n.o.s.* 2025 6.1</pre> | | |
| Dichloroisocyanuric acid, dry 2465 | A28 (135) The dihydrated sodium salt of | Classification – no action |
| 5.1 Dichloroisocyanuric acid salts 2465 | dichloroisocyanuric acid is not subject to | required |
| 5.1 | these Instructions. | |
| Bromobenzyl cyanides, liquid 1694 | A29 (138) p-Bromobenzyl cyanide is not | Classification – no action |
| 6.1 Bromobenzyl cyanides, solid 3449 | subject to these Instructions. | required |
| 6.1 | | |
| Seat-belt pretensioners † 0503 1.4G Seat-belt pretensioners † 3268 9 | A32 Air bag inflators, air bag modules or | Add "when carried as cargo" |
| | seat-belt pretensioners installed in conveyances or in completed conveyance | WG/11 decision - Agreed |
| Air bag inflators † 0503 1.4G | components such as steering columns, door | TO GITT UCCISION - Agricu |
| Air bag inflators † 3268 9 | panels, seats, etc., which are not capable of | |
| Air bag modules † 0503 1.4G | inadvertent activation are not subject to | |
| Air bag modules † 3268 9 | these Instructions. The words "not | |
| | restricted" and the special provision number | |
| | A32 must be provided on the air waybill when an air waybill is issued. | |
| | when all all wayout is issued. | |

| Reference in TI | Text | Comments |
|--|--|--|
| Table3-2.Special | A35 This substance is not subject to these | Classification – no action required |
| provisions – cont; Hafnium powder, wetted with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns1326 4.1 Titanium powder, wetted with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns 1352 4.1 Zirconium powder, wetted with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 53 microns; | <u>Instructions</u> when: — mechanically produced, particle size more than 53 microns; or — chemically produced, particle size more than 840 microns. | |
| | A41 Permeation devices that contain dangerous goods and that are used for calibrating air quality monitoring devices are not subject to these Instructions provided the following requirements are met: a) Each device must be constructed of a material compatible with the dangerous goods it contains; b) The total contents of dangerous goods in each device is limited to 2 millilitres and the device must not be liquid full at 55°C; c) Each permeation device must be placed in a sealed, high impact-resistant, tubular inner packaging of plastic or equivalent material. Sufficient absorbent material must be contained in the inner packaging to completely absorb the contents of the device. The closure of the inner packaging must be securely held in place with wire, tape or other positive means; d) Each inner packaging must be contained in a secondary packaging must be securely held in place with wire, tape or other positive means; d) Each inner packaging must be contained in a secondary packaging constructed of metal, or plastic having a minimum thickness of 1.5 mm. The secondary packaging must be securely packed in strong outer packaging. The completed package must be capable of withstanding, without breakage or leakage of any inner packaging and without significant reduction in effectiveness | Discussion required <u>Add "when carried as cargo",</u> <u>although consideration to be</u> <u>given to adding a provision in</u> <u>Part 8.</u> |

| Reference in TI | Text | Comments |
|---|---|-------------------------------------|
| Table3-2.Special | A42 (249) Ferrocerium (lighter flints), | Classification – no action required |
| provisions – cont; | stabilized against corrosion, with a | |
| Ferrocerium 1323 4.1 | minimum iron content of 10 per cent are not | |
| | subject to these Instructions. | |
| Genetically modified micro- 3245 9 | \neq A47 (219) Genetically modified micro- | Add "when carried as cargo" |
| Organisms | organisms (GMMOs) and genetically | |
| Genetically modified organisms | modified organisms (GMOs) packed and | |
| 3245 9 | marked in accordance with Packing | |
| | Instruction 959 are not subject to any other | |
| ~ | requirements in these Instructions. | |
| Solids containing toxic liquid, 3243 6.1 | A50 Mixtures of solids which are not | Classification – no action required |
| 5245 0.1 n.o.s.* | subject to these Instructions and toxic | |
| | liquids may be transported under this entry | |
| | without first applying the classification | |
| | criteria of Division 6.1, providing there is | |
| | no free liquid visible at the time the substance is packaged and the packaging | |
| | | |
| | must pass a leakproofness test at the | |
| | Packing Group II level. This entry must not | |
| | be used for solids containing a Packing Group Lliquid | |
| Aluminium silicon powder, 1398 | Group I liquid. A53 (37) This substance is not subject to | Classification no action required |
| 4.3 | these Instructions when coated | Classification – no action required |
| uncoated | these instructions when coated | |
| Silicon powder, amorphous 1346 | A54 (32) This substance is not subject to | Classification – no action required |
| 4.1 | these Instructions when in any other form. | |
| Seed cake with not more than 1.5% | A55 (142) Solvent extracted soya bean meal | Classification – no action required |
| 2217 4.2 oil and not more than 11% moisture | containing not more than 1.5 per cent oil | |
| on and not more than 1176 moisture | and not more than 11 per cent | |
| | moisture, which is substantially free of | |
| | flammable solvent, is not subject to these | |
| | Instructions. | |
| Alcoholic beverages containing 3065 3 | A58 (144) An aqueous solution containing | Classification – no action required |
| more than 24% but not more than | not more than 24 per cent alcohol by | |
| 70% alcohol by volume | volume is not subject to these | |
| _ Ethanol 1170 3 | Instructions. | |
| Ethanol solution 1170 3 | | |
| Ethyl alcohol 1170 3 Ethyl alcohol solution 1170 3 | | |
| | | |
| Tire assemblies inflated, _2.2 | A59 A tire assembly unserviceable or | Add "When carried as cargo" |
| unserviceable, damaged or above | damaged is not subject to these Instructions | |
| maximum rated pressure | if the tire is completely deflated. A tire | WG/11 decision – No action |
| | assembly with a serviceable tire is not | required. |
| | subject to these Instructions provided the | |
| | tire is not inflated to a gauge pressure | |
| | exceeding the maximum rated pressure for | |
| | that tire. However, such tires (including | |
| | valve assemblies) must be protected from | |
| | damage during transport, which may require | |
| | the use of a protective cover. | |

| Reference in TI | Text | Comments |
|---|--|------------------------------------|
| Table3-2.Special | A60 (215) This entry only applies to the | Classification – no action |
| provisions – cont; | technically pure substance or to | required |
| Azodicarbonamide 3242 4.1 | formulations derived from it having an | - |
| | SADT higher than 75°C and therefore does | |
| | not apply to formulations which are self- | |
| | reactive substances. (For self reactive | |
| | substances, see 2;4.2.3. Table 2-6). | |
| | Homogeneous mixtures containing not | |
| | more than 35 per cent by mass of | |
| | azocarbonamide and at least 65 per cent of | |
| | inert substance are <u>not subject to these</u> | |
| | Instructions unless criteria of other classes | |
| Plue eshestes (gracidalita) + 2212.0 | or divisions are met | Classification no estim |
| Blue asbestos (crocidolite) † 2212 9 Brown asbestos (amosite, 2212 9 | A61 (168) Asbestos which is immersed or | Classification – no action |
| mysorite) † | fixed in a natural or artificial binder (such as cement, plastics, asphalt, resins or | required |
| White asbestos (chrysotile, 2590 9 | mineral ore) in such a way that no escape of | |
| actinolite, anthophyllite, tremolite) † | hazardous quantities of respirable asbestos | |
| | fibres can occur during transport is <u>not</u> | |
| | subject to these Instructions. Manufactured | |
| | articles, containing asbestos and not | |
| | meeting this requirement, are nevertheless | |
| | not subject to these Instructions, when | |
| | packed so that no escape of hazardous | |
| | quantities of respirable asbestos fibres can | |
| | occur during transport. | |
| # Batteries, wet, non-spillable, 2800 | A67 Non-spillable batteries meeting the | Add "when carried as cargo" |
| electric storage | requirements of Packing Instruction 872 are | |
| # Battery-powered equipment 3171 9 | not subject to these Instructions if, at a | <u>WG/11 decision – agreed but</u> |
| | temperature of 55°C, the electrolyte will | also need to add a provision to |
| Battery-powered vehicle 3171 9 | not flow from a ruptured or cracked case. | <u>Part 8.</u> |
| + Engine, fuel cell, flammable gas | The battery must not contain any free or | |
| 3166 9 powered | unabsorbed liquid. Any electrical battery or battery powered device, equipment or | |
| | vehicle having the potential of dangerous | |
| + Engine, fuel cell, flammable liquid 3166 9 | evolution of heat must be prepared for | |
| powered | transport so as to prevent: | |
| # Engine, internal combustion, 3166 | a) a short circuit (e.g. in the case of | |
| 9 | batteries, by the effective insulation of | |
| flammable gas powered | exposed terminals; or, in the case of | |
| # Engine, internal combustion, 3166 | equipment, by disconnection of the battery | |
| 9 flammable liquid powered | and protection of exposed terminals); and | |
| Vehicle, flammable gas powered | b) unintentional activation. The words "not | |
| 3166 9 | restricted" and the special provision | |
| Vehicle, flammable liquid powered | number A67 must be provided on the air | |
| 3166 9 | waybill when an air waybill is issued. | |
| + Vehicle, fuel cell, flammable gas | | |
| 3166 9 | | |
| powered + Vehicle, fuel cell, flammable liquid | | |
| powered 3166 | | |

| Reference in TI | Text | Comments |
|--|---|---|
| Argon, compressed 1006 2.2 Gallium † 2803 8 Helium, compressed 1046 2.2 | A69 Articles, each containing not more than 100 mg of mercury, gallium or inert gas and packaged so that the quantity of mercury, gallium or inert gas per package does not | No action required – reference already made to "when carried as cargo" |
| Krypton, compressed 1056 2.2 Mercury contained in manufactured 2809 8 Articles Neon, compressed 1065 2.2 Nitrogen, compressed 1066 2.2 | exceed 1 g, <u>are not subject to these</u> <u>Instructions</u> when carried as cargo. The words "not restricted" and the special provision number A69 must be provided on the air waybill when an air waybill is issued. | |
| Xenon 2036 2.2 | | |
| Table3-2.Specialprovisions - cont;+ Engine, fuel cell, flammable gas3166 9powered _+ Engine, fuel cell, flammableliquid 3166 9powered _# Engine, internal combustion,3166 9flammable gas powered# Engine, internal combustion,3166 9flammable liquid poweredVehicle, flammable gas poweredVehicle, flammable liquid powered3166 9Vehicle, flammable liquid powered3166 9+ Vehicle, fuel cell, flammable gas3166 9powered _ | A70 Flammable liquid powered internal combustion engines being shipped either separately or incorporated into a vehicle, machine or other apparatus, without batteries or other dangerous goods, are not subject to these Instructions provided that 1. the engine is powered by a fuel that does not meet the classification criteria for any class or division; or 2. the fuel tank of the vehicle, machine or other apparatus has never contained any fuel or the fuel tank has been flushed and purged of vapours and adequate measures have been taken to nullify the hazard; and 3. the entire fuel system of the engine has no free liquid and all fuel lines are sealed or capped or securely connected to the engine and vehicle, machinery or apparatus. | Add "when carried as cargo" WH/11 decision – agreed, but add only at "nullify the hazard are not subject to these Instructions <u>when carried as</u> <u>cargo</u> provided that:" Note: proposed text takes account of decision taken on WG/11-WP/16 |
| + Vehicle, fuel cell, flammable liquid 3166 9 powered _ | Flammable gas powered internal combustion or fuel cell engines being shipped without batteries or other dangerous goods either separately or incorporated into a vehicle, machine or other apparatus that have contained fuel are not subject to these Instructions when carried as cargo provided that: 1. the entire fuel system has been flushed, purged and filled with a non-flammable gas or fluid to | |

| Reference in TI | Text | Comments |
|-----------------|--|----------|
| | nullify the Hazard; | |
| | 2. the final pressure of the non- flammable gas used to fill the system does not exceed 200kPa at 20°C; | |
| | 3. the shipper has made prior arrangements with the operator; | |
| | 4. the shipper has provided the operator with written or electronic documentation stating that the flushing, purging and filling procedure has been followed and that the final contents of the engine(s) have been tested and verified to be non-flammable. | |
| | Multiple engines may be shipped in a unit load device or other type of pallet provided that the shipper has made prior arrangements with the operator(s) for each shipment. | |

| Reference in TI | Text | Comments | | | |
|---|--|----------------|---|----|--------|
| Calcium cyanamide with more than | A71 (38) This substance is not subject to | Classification | _ | no | action |
| 1403 4.3 | these Instructions when it contains not more | required | | | |
| 0.1% of calcium carbide | than 0.1 per cent calcium | - | | | |
| | carbide. | | | | |
| Nitrocellulose membrane filters 3270 | A73 (237) The membrane filters, including | Classification | — | no | action |
| 4.1 | paper separators, coating, or backing | required | | | |
| with not more than 12.6% nitrogen, by dry mass | materials, etc., that are present in transport, | | | | |
| by ary mass | must not be liable to propagate a detonation | | | | |
| | as tested by one of the tests described in the | | | | |
| | UN Manual of Tests and Criteria, Part I, | | | | |
| | Test Series 1(a). In addition, the appropriate | | | | |
| | authority may determine, on the basis of the | | | | |
| | results of suitable burning rate tests taking | | | | |
| | account of the standard tests in the UN | | | | |
| | Manual of Tests and Criteria, Part III, | | | | |
| | subsection 33.2.1, that nitrocellulose | | | | |
| | membrane filters in the form in which they | | | | |
| | are to be transported <u>are not subject to the</u> | | | | |
| | provisions of these Instructions applicable to flammable solids in Division 4.1. | | | | |
| Phthalic anhydride with more than | A74 (169) Phthalic anhydride in the solid | Classification | | no | action |
| 2214 8 | state and tetrahydrophthalic anhydrides, | required | _ | no | action |
| 0.05% of maleic anhydride | with not more than 0.05 per cent | required | | | |
| | maleic anhydride, <u>are not subject to these</u> | | | | |
| Tetrahydrophthalic anhydrides 2698 8 | <u>Instructions</u> . Phthalic anhydride molten at a | | | | |
| o with more than 0.05% of maleic | temperature above its flash point, with not | | | | |
| anhydride | more than 0.05 per cent maleic anhydride, | | | | |
| | must be classified under UN 3256 | | | | |
| Solids containing corrosive liquid, | A77 Mixtures of solids which are not | Classification | _ | no | action |
| 3244 8 | subject to these Instructions and corrosive | required | | | |
| n.o.s.* | liquids may be transported under this entry | 1 | | | |
| | without first applying the classification | | | | |
| | criteria of Class 8, providing there is no free | | | | |
| | liquid visible at the time the substance is | | | | |
| | packaged and the packaging must pass a | | | | |
| | leakproofness test at the Packing | | | | |
| | Group II level | | | | |
| _Barium compound, n.o.s.* | A82 (177) Barium sulphate <u>is not subject to</u> | Classification | - | no | action |
| | these Instructions | required | | | |
| Calcium nitrate 1454 5.1 | A83 (208) The commercial grade of | Classification | - | no | action |
| | calcium nitrate fertilizer, when consisting | required | | | |
| | mainly of a double salt (calcium nitrate and | | | | |
| | ammonium nitrate) containing not more | | | | |
| | than 10 per cent ammonium nitrate and at | | | | |
| | least 12 per cent water of crystallization, is | | | | |
| | not subject to these Instructions. | | | | |

| Reference in TI | Text | Comments |
|---|--|---|
| Table 3-2. Special | A86 (241) The formulation must be prepared | Add "when carried as cargo" |
| provisions – cont; Nitrocellulose, with not more than 2557 4.1 12.6% nitrogen, by dry mass, mixture without plasticizer, without pigment | so that it remains homogeneous and does not separate during transport. Formulations with low nitrocellulose contents <u>are not subject to these Instructions</u> provided that 1) they do not exhibit dangerous properties | WG/11 decision - Classification – no action required |
| Nitrocellulose, with not more than 2557 4.1 12.6% nitrogen, by dry mass, mixture without plasticizer, without pigment | when tested for their liability to detonate, deflagrate or explode when heated under defined confinement by tests of test series 1(a), 2(b) and 2(c) respectively in the UN <i>Manual of Tests and Criteria</i> and | |
| Nitrocellulose, with not more than 2557 4.1 12.6% nitrogen, by dry mass, mixture with plasticizer, without pigment | 2) they are not flammable solids when tested in accordance with test N1 in the UN <i>Manual</i> of <i>Tests and Criteria</i> , Part III, subsection 3.3.2.1.4 (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm). | |
| Nitrocellulose, with not more than 2557 4.1 12.6% nitrogen, by dry mass, mixture with plasticizer, with pigment | | |
| Vehicle, flammable gas powered 3166 Vehicle, flammable liquid powered 3166 9 | A87 Articles which are not fully enclosed by packaging, crates or other means that prevent ready identification <u>are not subject to the marking requirements of 5;2</u> or the labelling requirements of 5;3. | No action required |
| + Vehicle, fuel cell, flammable gas 3166 9 powered _ + Vehicle, fuel cell, flammable liquid 3166 9 powered _ | requirements of 5,5. | |
| # Battery-powered equipment3171 9# Battery-powered vehicle 3171 9 | | |
| Ammonium nitrate fertilizers 2071 9 | A90 (193) This entry may only be used for uniform ammonium nitrate based fertilizer mixtures of the nitrogen, phosphate or potash type, containing not more than 70 per cent ammonium nitrate and not more than 0.4 per cent total combustible/organic material calculated as carbon or with not more than 45 per cent ammonium nitrate and unrestricted combustible material. Fertilizers within these composition limits <u>are not subject to these</u> <u>Instructions</u> if shown by a Trough Test (see UN <i>Manual of Tests and Criteria</i> , Part III, subsection 38.2) not to be liable to self- sustaining decomposition. | Classification – no action required |

| Reference in TI | Text | Comments |
|---|---|---|
| Table 3-2. Special | A92 (199) Lead compounds which, when | Classification – no action required |
| provisions – cont; # Lead compound, soluble, n.o.s.* 2291 6.1 | mixed in a ratio of 1:1000 with 0.07 M hydrochloric acid and stirred for 1 hour at a temperature of $23^{\circ}C \pm 2^{\circ}C$, exhibit a solubility of 5 per cent or less (see ISO 3711:1990 "Lead chromate pigments and | |
| | <i>lead chromate-molybdate pigments</i> — <i>Specifications and methods of test</i> ") are considered insoluble and <u>are not subject to</u> <u>these Instructions</u> unless they meet the criteria for inclusion in another hazard class or division. | |
| | A93 A heat-producing article <u>is not subject</u> to these Instructions when the heat- producing component or the energy source is removed to prevent unintentional functioning during transport. The words "not restricted" and the special provision number A93 must be provided on the air waybill when an air waybill is issued. | Classification – no action required (WG/11) |
| # Gas cartridges (non-flammable) 2037 2.2 without a release device, nonrefillable # Receptacles, small, containing 2037 2.2 gas (non-flammable) without a release device, non-refillable # Aerosols, non-flammable 1950 2.2 | A98 Aerosols, gas cartridges and receptacles, small, containing gas with a capacity not exceeding 50 ml, containing no constituents subject to these Instructions other than a Division 2.2 gas, are not subject to these Instructions unless their release could cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties. The words "not restricted" and the special provision number A98 must be provided on the air waybill when an air waybill is issued. | <u>Discussion required</u> <u>WG/11 decision - Add "when</u> <u>carried as cargo"</u> |
| Isosorbide-5-mononitrate 3251 4.1 | A105 (242) Sulphur is not subject to these Instructions when it has been formed to a specific shape (e.g. prills, granules,pellets, pastilles or flakes).A110 (226) Formulations of these substances containing not less than 30 per | Classification – no action required Classification – no action required |
| | cent non-volatile, non-flammable phlegmatizer <u>are not subject to these</u> <u>Instructions</u> | |

| Reference in TI | Text | Comments |
|------------------------------|---|--|
| Table3-2.Special | A114 (283) Articles, containing gas, | Discussion required |
| provisions – cont; | intended to function as shock absorbers, | |
| F | including impact energy absorbing devices, | WG/11 decision - Add "when |
| | or pneumatic springs are not subject to | carried as cargo" |
| Articles, pressurized, | these Instructions provided: | _ |
| hydraulic 3164 2.2 | a) each article has a gas space capacity not | |
| containing non-flammable gas | exceeding 1.6 litres and a charge pressure | |
| | not exceeding 280 bar where the product of | |
| Articles, pressurized, | the capacity (litres) and charge pressure | |
| pneumatic 3164 2.2 | (bars) does not exceed 80 (i.e. 0.5 litre gas | |
| containing non-flammable gas | space and 160 bar change pressure, 1 litre | |
| 0 0 | gas space and 80 bar charge pressure, 1.6 | |
| | litre gas space | |
| | and 50 bar charge pressure, 0.28 litre gas | |
| | space and 280 bar charge pressure); | |
| | b) each article has a minimum burst | |
| | pressure of 4 times the charge pressure at | |
| | 20°C for products not exceeding 0.5 litre | |
| | gas space capacity and 5 times charge | |
| | pressure for products greater than 0.5 litre | |
| | gas space capacity; | |
| | c) each article is manufactured from | |
| | material which will not fragment upon | |
| | rupture; | |
| | d) each article is manufactured in | |
| | accordance with a quality assurance | |
| | standard acceptable to the appropriate | |
| | national authority; and e) the design type has been subjected to a | |
| | fire test demonstrating that pressure in the | |
| | article is relieved by | |
| | means of a fire-degradable seal or other | |
| | pressure-relief device such that the article | |
| | will not fragment and the article does not | |
| | rocket. | |
| | A122 (286) Nitrocellulose membrane filters | [Discussion required] |
| Nitrocellulose membrane | covered by this entry, each with a mass not | |
| filters 3270 4.1 | exceeding 0.5 g, are not subject to these | |
| with not more than 12.6% | Instructions when contained individually in | |
| nitrogen, | an article or a sealed packet. | |
| by dry mass | | |
| Ammonium nitrate, liquid | A129 (252) Provided the ammonium nitrate | Add "when carried as cargo" |
| (hot 2426 5.1 | remains in solution under all conditions of | <u></u> when curried up cur <u>c</u> o |
| concentrated solution) | transport, aqueous solutions of ammonium | WG/11 decision - agreed |
| | nitrate, with not more than 0.2 per cent | |
| | combustible material, in a concentration not | |
| | exceeding 80 per cent are not subject to | |
| | these Instructions. | |
| | | |

| Reference in TI | Text | Comments |
|-------------------------------|---|-------------------------------------|
| Nitrogen, refrigerated liquid | \neq A152 Insulated packagings conforming | Add "when carried as cargo" |
| 1977 2.2 | to the requirements of Packing Instruction | Aud when carried as cargo |
| 1977 2.2 | 202 containing refrigerated liquid nitrogen | WG/11 decision - No action |
| | fully absorbed in a porous material are <u>not</u> | |
| | subject to these Instructions provided the | <u>required</u> |
| | design of the insulated packaging would | |
| | not allow the build-up of pressure within | |
| | the container and would not permit the | |
| | release of any refrigerated liquid nitrogen | |
| | irrespective of the orientation of the insulated packaging and any outer | |
| | packaging or overpack used is closed in a | |
| | way that will not allow the build-up of | |
| | pressure within that packaging or | |
| | overpack. When used to contain substances | |
| | not subject to these Instructions, the words | |
| | "not restricted" and the special provision | |
| | number A152 must be provided on the air | |
| | waybill when an | |
| | air waybill is issued. | |
| Magnesium nitrate 1474 5.1 | A155 (332) Magnesium nitrate | Classification – no action required |
| | hexahydrate is not subject to these | |
| | Instructions. | |
| Environmentally hazardous | A158 (335) Mixtures of solids which are | Discussion required (on second |
| 3082 9 | not subject to these Instructions and liquids or solids classified by the shipper | <u>reference)</u> |
| substance, liquid, n.o.s.* | as environmentally hazardous substances | |
| | (UN 3077 and 3082) (see Special | WG/11 decision – no action |
| # Environmentally hazardous | Provision A97) may be transported under | <u>required.</u> |
| 3077 9 | this entry, provided there is no free liquid | |
| substance, solid, n.o.s.* | visible at the time the substance is loaded | |
| | or at the time the packaging is closed. | |
| | Sealed packets and articles containing less | |
| | than 10 mL of an environmentally | |
| | hazardous liquid, absorbed into a solid | |
| | material but with no free liquid in the | |
| | packet or article, or containing less than 10 | |
| | g of an environmentally hazardous solid, are not subject to these | |
| | Instructions | |
| | + A178 Security type equipment such as | No action required, aligns with |
| # Security type equipment | attaché cases, cash boxes, cash bags, etc., | passenger/crew provisions of Part |
| # Security type equipment _ | incorporating dangerous goods, for | 8 |
| FORBIDDEN | example lithium batteries, gas cartridges | 0 |
| | and/or pyrotechnic material, are not subject | |
| | to these Instructions if the equipment | |
| | complies with the following: | |
| | a) The equipment must be equipped with an effective means of preventing accidental | |
| | activation; | |
| | b) If the equipment contains an explosive | |
| | or pyrotechnic substance or an explosive | |
| | article, this article or substance must be | |
| | excluded from Class 1 by the appropriate | |
| | national authority of the State of | |
| | Manufacture in compliance with Part | |
| | 2;1.5.2.1; | |

| Reference in TI | Text | Comments |
|--|---|---|
| Table3-2.Special | + A180 Non-infectious specimens, such as | Discussion required |
| provisions – cont; | specimens of mammals, birds, amphibians, reptiles, fish, insects and other | WG/11 decision – no action |
| # Alcohols, n.o.s.* 1987 3 | invertebrates containing small quantities of UN 1170, UN 1198, UN 1987 or UN 1219 | required, although consideration to be given to add |
| # Ethanol 1170 3 | are not subject to these Instructions provided the following packing and | similar text to Part 8. |
| # Ethanol solution 1170 3 | marking requirements are met: a) specimens are: | |
| # Ethyl alcohol 1170 3 | 1) wrapped in paper towel and/or cheesecloth moistened with alcohol or an | |
| # Ethyl alcohol solution 1170 3 | alcohol solution and then placed in a plastic bag that is heat-sealed. Any free | |
| # Formaldehyde solution, flammable 1198 3 8 | liquid in the bag must not exceed 30 mL; or 2) placed in vials or other rigid containers | |
| # Isopropanol 1219 3 | with no more than 30 mL of alcohol or an alcohol solution; | |
| # Isopropyl alcohol 1219 3 | b) the prepared specimens are then placed in a plastic bag that is then heat-sealed; | |
| | c) the bagged specimens are then placed inside a another plastic bag with absorbent material then heatsealed; | |
| | d) the finished bag is then placed in a strong outer packaging with suitable | |
| | cushioning material; e) the total quantity of flammable liquid | |
| | per outer packaging must not exceed 1 L; and | |
| | f) the completed package is marked "scientific research specimens, not | |
| | restricted Special Provision A180 applies". | |
| | The words "not restricted" and the special | |
| | provision number A180 must be provided | |
| | on the air waybill when an air waybill is | |
| | issued. | |

| Reference in TI | Text | Comments |
|---|---|---|
| 5.1 EXCEPTED | \neq 5.1.1 Excepted quantities of dangerous | Perhaps add a new h) "the |
| S.I EXCEPTED QUANTITIES | \neq 5.1.1 Excepted quantities of dangerous goods of certain classes, other than articles, meeting the provisions of this chapter <u>are not subject to any other</u> <u>provisions</u> of these Instructions except for: a) the prohibition in post in 1;2.3; b) the definitions in 1;3; c) the training requirements in 1;4; d) the classification procedures and packing group criteria in Part 2; e) the packaging requirements of 4;1.1.1, 4;1.1.3.1, 4;1.1.5, 4;1.1.6, 4;1.1.7 and 4;1.1.8 (4;1.1.6 does not apply to UN 3082); f) the loading restriction in 7;2.1; and g) the reporting requirements of dangerous goods accidents, incidents and other occurrences in 7;4.4 and 7;4.5. Note.— In the case of radioactive material, the requirements for radioactive material | Perhaps add a new h) "the prohibition of dangerous goods in baggage in 8;1,1 WG/11 decision – agreed to add a new h) "the prohibition of dangerous goods in baggage in 8;1,1 |
| | in excepted packages in 1;6.1.5 apply. | |
| Packing Instruction 202 This instruction applies to Class 2 | Note.— Insulated packagings containing refrigerated liquid nitrogen fully absorbed | Add "when carried as cargo" |
| refrigerated liquefied gases in open and closed cryogenic receptacles. | in a porous material <u>are not subject to</u> <u>these Instructions</u> provided they meet the requirements of Special Provision A152. | WG/11 decision – agreed to add "when carried as cargo" and also a provision in Part 8. |
| Packing Instruction 492 Passenger and cargo aircraft for UN 3292 only | Batteries may be offered for transport and transported unpacked or in protective enclosures such as fully enclosed or wooden slatted crates that <u>are not subject</u> to the requirements of Part 6 of these Instructions. | Discussion required WG/11 decision – no action required. |
| Packing Instruction 620 This packing instruction applies to UN 2814 and UN 2900. | f) Other dangerous goods must not be packed in the same packaging as Division 6.2 infectious substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 ml or less of dangerous goods included in Class 3, 8 or 9 may be packed in each primary receptacle containing infectious substances provided these substances meet the requirements of 3;5. These small quantities of dangerous goods of Class 3, 8 or 9 are not subject to any additional requirements of these <u>Instructions</u> when packed in accordance with this packing instruction. | No action required because 6.2 substances not permitted in baggage. |

| Reference in TI | Text | Comments |
|-------------------------------------|---|-----------------------------------|
| Packing Instruction 650 | 11) Infectious substances assigned to UN | No action required as carriage in |
| This packing instruction applies to | 3373 which are packed and marked in | baggage addressed |
| UN 3373. | accordance with this packing instruction | by f) |
| | are not subject to any other requirement in | 5 / |
| | these Instructions except for the following: | |
| | a) the name and address of the shipper and | |
| | of the consignee must be provided on each | |
| | package; | |
| | b) the name and telephone number of a | |
| | person responsible must be provided on a | |
| | written document (such as an air | |
| | waybill) or on the package; | |
| | c) classification must be in accordance with | |
| | 2;6.3.2; | |
| | d) the incident reporting requirements in | |
| | 7;4.4 must be met; | |
| | e) the inspection for damage or leakage | |
| | requirements in 7;3.1.3 and 7;3.1.4; and | |
| | f) passengers and crew members are | |
| | prohibited from transporting infectious | |
| | substances either as, or in, carry-on | |
| | baggage or checked baggage or on their | |
| | person. | |
| | Note.— When the shipper or consignee is | |
| | also the "person responsible" as referred to | |
| | in b), the name and address | |
| | need be marked only once in order to satisfy | |
| | the name and marking provisions in both a) | |
| | and b). | |
| Packing Instruction 953 | Magnetized materials with field strengths | Add "when carried as cargo" |
| Passenger and cargo aircraft for | causing a compass deflection of more than 2 | |
| UN 2807 only | degrees at a distance of 2.1 m but not more | |
| | than 2 degrees at a distance of 4.6 m | |
| | (equivalent to 0.418 A/m or 0.00525 Gauss | |
| | measured at a distance of 4.6 m) are not | |
| | subject to any other requirements in these | |
| | Instructions except for the following: | |
| | a) the shipper must make prior | |
| | arrangements with the operator identifying | |
| | the magnetized material. The dangerous | |
| | goods transport document requirements of | |
| | Part 5;4 are not applicable provided | |
| | alternative written or electronic | |
| | documentation includes the words | |
| | "magnetized material" in association with | |
| | the description of the goods; | |
| | b) the package must bear the magnetized | |
| | material handling label; | |
| | | |
| | | |
| | | |
| | | |
| | a) the incident reporting requirements of 7;4.4 must be met. | |
| | c) the operator must stow the packaged magnetized material in accordance with 7;2.10; andd) the incident reporting requirements of | |

| Reference in TI | Text | Comments |
|----------------------------------|---|-----------------------------|
| Packing Instruction 959 | GMOs or GMMOs assigned to UN 3245 | Add "when carried as cargo" |
| Passenger and cargo aircraft for | which are packed and marked in accordance | |
| UN 3245 only | with this packing instruction | WG/11 decision – no action |
| | are not subject to any other requirement in | required |
| | these Instructions except for the following: | |
| | 1) the name and address of the shipper and of | |
| | the consignee must be provided on each | |
| | package; | |
| | 2) classification must be in accordance with | |
| | 2;9.2.1 c); | |
| | 3) the incident reporting requirements in 7;4.4 must be met; | |
| | 4) the inspection for damage or leakage | |
| | requirements in 7;3.1.3 and 7;3.1.4; | |
| | 5) passengers and crew members are | |
| | prohibited from transporting UN 3245 either | |
| | as, or in, carry-on baggage or | |
| | checked baggage or on their person. | |
| | ADDITIONAL PACKING | |
| | REQUIREMENTS | |
| | — When dry ice or liquid nitrogen is used, all | |
| | applicable requirements of these Instructions | |
| | must be met. When | |
| | used, ice or dry ice must be placed outside the | |
| | secondary packagings or in the outer | |
| | packaging or an overpack. | |
| | Interior supports must be provided to secure | |
| | the secondary packagings in the original | |
| | position after the ice or | |
| | dry ice has dissipated. If ice is used, the | |
| | outside packaging or overpack must be | |
| | leakproof. If dry ice is used, the | |
| | requirements in Packing Instruction 954 must | |
| | be met. | |
| | — The primary receptacle and the secondary packaging must maintain their integrity at the | |
| | temperature of the | |
| | refrigerant used as well as the temperatures | |
| | and the pressures which could result if | |
| | refrigeration were lost. | |
| | Tomporation word tost. | |

| Reference in TI | Text | Comments |
|---|---|---|
| Reference in TI Packing Instruction 965 Passenger and cargo aircraft for UN 3480 This entry applies to lithium ion or lithium polymer batteries. | Section I of this packing instruction applies to lithium ion and lithium polymer cells and batteries that are assigned to Class 9. Certain lithium ion and lithium polymer cells and batteries offered for transport and meeting the requirements of Section II of this packing instruction, subject to the paragraphs above, are not subject to other additional requirements of these Instructions. SECTION I Section I requirements apply to each cell or | CommentsAdd "when carried as cargo"WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| | battery type that has been determined to meet the criteria for assignment to Class 9. Each cell or battery must: 1) be of the type proven to meet the requirements of each test in the UN <i>Manual</i> of Tests and Criteria, Part III, section 38.3; and Note.— Batteries are subject to these tests irrespective of whether the cells of which they arecomposed have been so tested. 2) incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to | |
| | under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits. Each battery containing cells or a series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses). | |

| Reference in TI | Text | Comments |
|--|---|---|
| Packing Instruction 965 | SECTION II | Add "when carried as cargo" |
| Cont; Passenger and cargo aircraft for UN 3480 This entry applies to lithium ion or lithium polymer batteries. | Lithium ion cells and batteries offered for transport are not subject to other additional requirements of these Instructions if they meet the requirements of this section. Lithium ion cells and batteries may be offered for transport if they meet the following: 1) for lithium ion cells, the Watt-hour rating (see the Glossary of Terms in Attachment 2) is not more than 20 Wh; 2) for lithium ion batteries, the Watt-hour rating is not more than 100 Wh; — the Watt-hour rating must be marked on the outside of the battery case except for those batteries manufactured before 1 January 2009; 3) each cell or battery is of the type proven to meet the requirements of each test in the UN <i>Manual of Tests and Criteria</i> , Part III, section 38.3. <i>Note.</i> — Batteries are subject to these tests irrespective of whether the cells of which they | WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| Packing Instruction 966 Passenger and cargo aircraft for UN 3481 (packed with equipment) only This entry applies to lithium ion or lithium polymer batteries packed with equipment. | <i>are composed have been so tested.</i> Section I of this packing instruction applies to lithium ion and lithium polymer cells and batteries that are assigned to Class 9. Certain lithium ion and lithium polymer cells and batteries offered for transport and meeting the requirements of Section II of this packing instruction, subject to the paragraph above, are not subject to other additional requirements of these Instructions. SECTION I Section I requirements apply to each cell or battery type that has been determined to meet the criteria for assignment to Class 9. Each cell or battery must: 1) be of the type proven to meet the requirements of each test in the UN <i>Manual of Tests and Criteria</i>, Part III, section 38.3; and <i>Note.— Batteries are subject to these tests irrespective of whether the cells of which they are composed have been so tested</i>. 2) incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing cells or a series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses | Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |

| Reference in TI | Text | Comments |
|--|--|---|
| Packing Instruction 966 | SECTION II | Add "when carried as cargo" |
| cont; Passenger and cargo aircraft for UN 3481 (packed with equipment) only This entry applies to lithium ion or lithium polymer batteries packed with equipment. | Lithium ion cells and batteries packed with equipment offered for transport are not subject to other additional requirements of these Instructions if they meet the requirements of this section. Lithium ion cells and batteries may be offered for transport if they meet the following: 1) for lithium ion cells, the Watt-hour rating (see the Glossary of Terms in Attachment 2) is not more than 20 Wh; 2) for lithium ion batteries, the Watt-hour rating is not more than 100 Wh; — the Watt-hour rating must be marked on the outside of the battery case except for those batteries manufactured before 1 January 2009; 3) each cell or battery is of the type proven to meet the requirements of each test in the UN <i>Manual of Tests and Criteria</i> , Part III, section 38.3. | WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| Packing Instruction 967 Passenger and cargo aircraft for UN 3481 (contained in equipment) only This entry applies to lithium ion or lithium polymer batteries contained in equipment. | Note.— Batteries Section I of this packing instruction applies to lithium ion and lithium polymer cells and batteries that are assigned to Class 9. Certain lithium ion and lithium polymer cells and batteries offered for transport and meeting the requirements of Section II of this packing instruction, subject to the paragraph above, are not subject to other additional requirements of these Instructions. SECTION I Section I requirements apply to each cell or battery type that has been determined to meet the criteria for assignment to Class 9. Each cell or battery must: 1) be of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, section 38.3; and Note.— Batteries are subject to these tests irrespective of whether the cells of which they are composed have been so tested. 2) incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits. Each battery containing cells or a series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses). | Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |

| Reference in TI | Text | Comments |
|--|--|--------------------------------|
| Packing Instruction 967 | SECTION II | Add "when carried as cargo" |
| cont; | Lithium ion cells and batteries contained in | 8 |
| Passenger and cargo aircraft for | equipment offered for transport are not | WG/11 decision – no action |
| UN 3481 (contained in equipment) | subject to other additional requirements of | required; addressed by |
| only | these Instructions if they meet the | agreement of WG/11-WP/40 |
| This entry applies to lithium ion | requirements of this section. | (which clarifies that the |
| or lithium polymer batteries contained in equipment. | Lithium ion cells and batteries may be offered | prohibition |
| containeu în equipment. | for transport if they meet the following: | in air mail, the reporting of |
| | 1) for lithium ion cells ,the Watt-hour rating | dangerous goods accidents and |
| | (see the Glossary of Terms in Attachment 2) | incidents, and the provisions |
| | is not more than 20 Wh; | for passengers and crew should |
| | 2) for lithium ion batteries, the Watt-hour | apply.) |
| | rating is not more than 100 Wh; | |
| | — the Watt-hour rating must be marked on | |
| | the outside of the battery case except for those | |
| | batteries manufactured before 1 January 2009; | |
| | 3) each cell or battery is of the type proven to | |
| | meet the requirements of each test in the UN | |
| | Manual of Tests and Criteria, Part III, section | |
| | 38.3. | |
| | Note.— Batteries are subject to these tests | |
| | irrespective of whether the cells of which they | |
| | are composed have been so tested. | |
| | Devices such as radio frequency identification | |
| | (RFID) tags, watches and temperature | |
| | loggers, which are not capable of generating a | |
| | dangerous evolution of heat, may be | |
| | transported when intentionally active. When | |
| | active, these devices must meet defined | |
| | standards for electromagnetic radiation to | |
| | ensure that the operation of the device does | |
| | not interfere with aircraft systems. | |
| | General requirements | |
| | Equipment must be packed in strong outer | |
| | packagings that conform to Part 4;1.1.1, | |
| | 1.1.3.1 and 1.1.10 (except 1.1.10.1). | |
| | ADDITIONAL PACKING | |
| | REQUIREMENTS | |

| Reference in TI | Text | Comments |
|--|--|---|
| Packing Instruction 968 Passenger and cargo aircraft for UN 3090 Passenger and cargo aircraft for UN 3090 This entry applies to lithium metal or lithium alloy batteries in Class 9 (Section I) and lithium metal or lithium alloy batteries subject to specific requirements of these Instructions (Section II). | Section I of this packing instruction applies to lithium metal and lithium alloy cells and batteries that are assigned to Class 9. Certain lithium metal and lithium alloy cells and batteries offered for transport and meeting the requirements of Section II of this packing instruction, subject to the paragraphs above, are not subject to other additional requirements of these Instructions. SECTION I Section I requirements apply to each cell or battery type that has been determined to meet the criteria for assignment to Class 9. Each cell or battery must: be of the type proven to meet the requirements of each test in the UN <i>Manual of Tests and Criteria</i>, Part III, section 38.3; and <i>Note.— Batteries are subject to these tests irrespective of whether the cells of which they are composed have been so tested</i>. incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits. Each battery containing cells or a series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses). | Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| Packing Instruction 968 cont; Passenger and cargo aircraft for UN 3090 This entry applies to lithium metal or lithium alloy batteries in Class 9 (Section I) and lithium metal or lithium alloy batteries subject to specific requirements of these Instructions (Section II). | SECTION II Lithium metal or lithium alloy cells and batteries offered for transport are not subject to other additional requirements of these Instructions if they meet the requirements of this section. Lithium metal or lithium alloy cells and batteries may be offered for transport if they meet the following: for a lithium metal cell the lithium content is not more than 1 g; for a lithium metal or lithium content is not more than 2 g; each cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, section 38.3. Note.— Batteries are subject to these tests irrespective of whether the cells of which they are composed have been so tested. | Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |

| General requirements | |
|--|--|
| Batteries must be packed in strong outer | |
| packagings that conform to Part 4;1.1.1, | |
| 1.1.3.1 and 1.1.10 (except 1.1.10.1). | |

| Reference in TI | Text | Comments |
|--|--|-----------------------------------|
| Packing Instruction 969 | Section I of this packing instruction applies | Add "when carried as cargo" |
| Passenger and cargo aircraft for UN | to lithium metal and lithium alloy cells and | 8 |
| 3091 (packed with equipment) only | batteries that are assigned to Class 9. | WG/11 decision – no action |
| This entry applies to lithium metal or | Certain lithium metal and lithium alloy cells | required; addressed by |
| lithium alloy batteries packed with | and batteries offered for transport and | agreement of WG/11-WP/40 |
| equipment | meeting the requirements of Section II of | (which clarifies that the |
| | this packing instruction, subject to the | prohibition |
| | paragraph above, are not subject to other | in air mail, the reporting of |
| | additional requirements of these | dangerous goods accidents and |
| | Instructions. | incidents, and the provisions for |
| | SECTION I | passengers and crew should |
| | Section I requirements apply to each cell or | apply.) |
| | battery type that has been determined to | |
| | meet the criteria for assignment to Class 9. | |
| | Each cell or battery must: | |
| | 1) be of the type proven to meet the | |
| | requirements of each test in the UN Manual | |
| | of Tests and Criteria, Part III, section 38.3; | |
| | and | |
| | Note.— Batteries are subject to these tests | |
| | irrespective of whether the cells of which | |
| | they are composed have been so tested. | |
| | 2) incorporate a safety venting device or be | |
| | designed to preclude a violent rupture under | |
| | conditions normally incident to transport | |
| | and be equipped with an effective means of | |
| | preventing external short circuits. | |
| | Each battery containing cells or a series of | |
| | cells connected in parallel must be equipped | |
| | with an effective means, as necessary, to | |
| | prevent dangerous reverse current flow (e.g. | |
| | diodes, fuses). | |
| | SECTION II | Add "when carried as cargo" |
| | Lithium metal cells and batteries packed | |
| | with equipment offered for transport are not | WG/11 decision – no action |
| | subject to other additional requirements of | required; addressed by |
| | these Instructions if they meet the | agreement of WG/11-WP/40 |
| | requirements of this section. | (which clarifies that the |
| | Lithium metal cells and batteries may be | prohibition |
| | offered for transport if they meet the | in air mail, the reporting of |
| | following: | dangerous goods accidents and |
| | 1) for a lithium metal cell the lithium | incidents, and the provisions for |
| | content is not more than 1 g; | passengers and crew should |
| | 2) for a lithium metal or lithium alloy | apply.) |
| | battery, the aggregate lithium content is not | |
| | more than 2 g; | |
| | 3) each cell or battery is of the type proven | |
| | to meet the requirements of each test in the | |
| | UN Manual of Tests and Criteria, Part III, | |
| | section 38.3. Note.— Batteries are subject | |
| | to these tests irrespective of whether the | |
| | cells of which they are composed have been | |
| | so tested. | |

| General requirements | |
|--|--|
| Batteries must be packed in strong outer | |
| packagings that conform to Part 4;1.1.1, | |
| 1.1.3.1 and 1.1.10 (except 1.1.10.1). | |

| Reference in TI | Text | Comments |
|---|--|---|
| Reference in TI Packing Instruction 970 Passenger and cargo aircraft for UN 3091 (contained in equipment) only This entry applies to lithium metal or lithium alloy batteries contained in equipment. | Section I of this packing instruction applies to lithium metal and lithium alloy cells and batteries that are assigned to Class 9. Certain lithium metal and lithium alloy cells and batteries offered for transport and meeting the requirements of Section II of this packing instruction, subject to the paragraph above, are not subject to other additional requirements of these Instructions. SECTION I Section I requirements apply to each cell or battery type that has been determined to meet the criteria for assignment to Class 9. Each cell or battery must: | Comments Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| | | |
| | they are composed have been so tested. 2) incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits. Each battery containing cells or a series of cells connected in parallel must be equipped with an effective means, as | |
| | necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses). | |

| Reference in TI | Text | Comments |
|---|--|--|
| Packing Instruction 970 | SECTION II | Add "when carried as cargo" |
| Packing Instruction 970 cont; Passenger and cargo aircraft for UN 3091 (contained in equipment) only This entry applies to lithium metal or lithium alloy batteries contained in equipment. | SECTION II Lithium metal cells and batteries contained in equipment offered for transport are not subject to other additional requirements of these Instructions if they meet the requirements of this section. Lithium metal cells and batteries may be offered for transport if they meet the following: for a lithium metal cell the lithium content is not more than 1 g; for a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2 g. each cell or battery is of the type proven to meet the requirements of each test in the UN <i>Manual of Tests and Criteria</i>, Part III, section 38.3. <i>Note.</i>—<i>Batteries are subject to these tests irrespective of whether the cells of which they are composed have been so tested.</i> Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. When active, these devices must meet defined standards for electromagnetic radiation to ensure that the operation of the device does not interfere with aircraft systems. | Add "when carried as cargo" WG/11 decision – no action required; addressed by agreement of WG/11-WP/40 (which clarifies that the prohibition in air mail, the reporting of dangerous goods accidents and incidents, and the provisions for passengers and crew should apply.) |
| 3.5.2 Handling Labels | ✓ Packages containing lithium batteries packed according to Packing Instructions 965 to 970 that are not subject to other additional requirements of these Instructions must bear a "Lithium battery" handling label shown in Figure 5-31, as required by the applicable packing instruction. The label must be a minimum dimension of 120 mm × 110 mm except labels of 74 mm × 105 mm may be used on packages containing lithium batteries where the packages are of dimensions such that they can only bear smaller labels. The label must show "Lithium metal batteries" or "Lithium ion batteries", as applicable. Where the package contains both types of batteries, the label must show "Lithium metal and lithium ion batteries". | Add "when carried as cargo" WG/11 decision – amend text to read: "Packages containing lithium batteries <u>that meet the</u> requirements of Section II of packed according to Packing Instructions 965 to 970 that are not subject to other additional requirements of these Instructions must bear |

| Reference in TI | Text | Comments |
|-------------------------|---|---|
| 4.4 Reporting of | An operator must report dangerous goods | No action required. |
| Dangerous Goods | accidents and incidents to the appropriate | |
| Accidents and Incidents | authorities of the State of the Operator and the State in which the accident or incident occurred in accordance with the reporting requirements of those appropriate authorities. Note.— This includes incidents involving dangerous goods that are not subject to all or part of the Technical Instructions through the application of an exception or of a special provision (e.g. an incident involving the short circuiting of a dry cell battery that is required to meet short circuit | WG/11 decision – amend text to read: "Note.— This includes incidents involving dangerous goods that are not subject to all or part of the <u>se</u> Technical Instructions through the application |
| | prevention conditions in a special provision | |
| | of 3;3). | |
| Chapter 6 - 6.1 | <i>dry shipper (vapour shipper)</i> — may contain free liquid nitrogen. Dry shippers | Discussion required |
| | are not subject to these Instructions only | WG/11 decision – No action |
| | when | required. |
| | they do not permit the release of any free | |
| | liquid nitrogen irrespective of the orientation of the packaging | |

— END —