

MARITIME SAFETY COMMITTEE  
99th session  
Agenda item 22

MSC 99/22/Add.1/Corr.2  
20 November 2019  
ENGLISH ONLY

**REPORT OF THE MARITIME SAFETY COMMITTEE ON  
ITS NINETY-NINTH SESSION**

**Corrigendum\***

**ANNEX 7**

**RESOLUTION MSC.442(99) – AMENDMENTS TO THE INTERNATIONAL  
MARITIME DANGEROUS GOODS (IMDG) CODE**

**(Editorial corrections to the English version)**

**PART 2  
CLASSIFICATION**

**Chapter 2.2  
Class 2 – Gases**

**2.2.1 Definitions and general provisions**

2.2.1.2.3 At the end of paragraph 2.2.1.2.3 delete "or".

**Chapter 2.4**

**Class 4 – Flammable solids; substances liable to spontaneous combustion;  
substances which, in contact with water, emit flammable gases**

**2.4.2 Class 4.1 – Flammable solids, self-reactive substances, solid desensitized  
explosives and polymerizing substances**

2.4.2.3.1.2.5 Replace "Aromatic sulphohydrazides" with "Aromatic sulphonylhydrazides".

**Chapter 2.5**

**Class 5 – Oxidizing substances and organic peroxides**

**2.5.3 Class 5.2 – Organic peroxides**

**2.5.3.2.4 List of currently assigned organic peroxides in packagings**

For the entry UN 3109 1-PHENYLETHYL HYDROPEROXIDE, move "≥ 62" from column "Diluent Type A (%)" to column "Diluent Type B (%)".

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\* Applicable only to the English version of resolution MSC.442(99).

**Chapter 2.8**  
**Class 8 – Corrosive substances**

**2.8.3 Packing group assignment for substances and mixtures**

2.8.3.2 Replace "the grouping shall be based" with "the assignment shall be based".

**2.8.4 Alternative packing group assignment methods for mixtures: step-wise approach**

**2.8.4.3 Calculation method based on the classification of the substances**

2.8.4.3.3 After the existing text, add the following:

"For this calculation method, generic concentration limits apply where 1% is used in the first step for the assessment of the packing group I substances, and where 5% is used for the other steps respectively."

2.8.4.3.4 Delete the last sentence.

**Chapter 2.9**  
**Miscellaneous dangerous substances and articles (class 9)**  
**and environmentally hazardous substances**

**2.9.2 Assignment to class 9**

2.9.2.2 Under the heading "Lithium batteries", after the entry for 3536 "LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNITS", insert "lithium ion batteries or lithium metal batteries".

**PART 3**  
**DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND EXCEPTIONS**

**Chapter 3.1**  
**General**

**3.1.4 Segregation groups**

3.1.4.4 Amend the corresponding segregation groups listed as follows:

**7 Heavy metals and their salts (including their organometallic compounds) (SGG7)**

Place the two entries for UN 1931 in the correct alphabetical order:

"UN 1931 Zinc dithionite" then "UN 1931 Zinc hydrosulphite".

**8 Hypochlorites (SGG8)**

For the entry UN 1748, replace the text as follows: "Calcium hypochlorite, dry or calcium hypochlorite mixture, dry with more than 39% available chlorine (8.8% available oxygen)".

**11 Mercury and mercury compounds (SGG11)**

For the entry UN 0135, replace the text as follows: "Mercury fulminate, wetted with not less than 20% water, or mixture of alcohol and water, by mass".

**15 Powdered metals (SGG15)**

For the entry UN 1418, replace the text as follows: "Magnesium powder or magnesium alloys powder".

For the entry UN 3170, replace the text as follows: "Aluminium smelting by-products or aluminium remelting by-products".

**17 Azides (SGG17)**

For the entry UN 0129, replace the text as follows: "Lead azide, wetted with not less than 20% water, or mixture of alcohol and water, by mass".

For the entry UN 0224, replace the text as follows: "Barium azide, dry or wetted with less than 50% water, by mass".

For the entry UN 1571, replace the text as follows: "Barium azide, wetted with not less than 50% water, by mass".

**18 Alkalis (SGG18)**

For the entry UN 2671, replace the text as follows: "Aminopyridines (*o*-, *m*-, *p*-)".

For the entry UN 2678, replace the text as follows: "Rubidium hydroxide".

**Chapter 3.2  
Dangerous Goods List**

UN No.	Amendment
1011	Delete "392" in column 5 and insert "392" in column 6
1016	Delete "974" in column 5 and insert "974" in column 6
1051	In column (15), replace "S-D" with " <u>S-D</u> "
1092	In column (15), replace "S-D" with " <u>S-D</u> "
1098	In column (15), replace "S-D" with " <u>S-D</u> "
1099	In column (15), replace "S-D" with " <u>S-D</u> "
1143	In column (15), replace "S-D" with " <u>S-D</u> "
1144	In column 17, replace the words "Explosive limits: 1.4% to ..." with "Lower explosive limit: 1.4%."
1156	In column 17, replace the words "Explosive limits: 1.6% to ..." with "Lower explosive limit: 1.6%."
1163	In column (15), replace "S-C" with " <u>S-C</u> ", and in column (16b), move "SGG18" above "SG5"
1206	In column (15), replace "S-D" with " <u>S-D</u> "
1208	In column (15), replace "S-D" with " <u>S-D</u> "
1218	In column (15), replace "S-D" with " <u>S-D</u> "
1244	In column (16b), move "SGG18" above "SG5"

<b>UN No.</b>	<b>Amendment</b>
1259	In column (15), replace "S-D" with "S-D"
1264	In column 17, replace the words "Explosive limits: 1.3% to ..." with "Lower explosive limit: 1.3%."
1303	In column (15), replace "S-D" with "S-D"
1305	In column 17, replace the words "Explosive limits: 3% to ..." with "Lower explosive limit: 3%."
1347	In column (16b), move "SGG7" above "SG7"
1449	In column (16b), move "SGG16" above "SG16"
1457	In column (16b), move "SGG16" above "SG16"
1472	In column (16b), move "SGG16" above "SG16"
1476	In column (16b), move "SGG16" above "SG16"
1483 PG II	In column (16b), move "SGG16" above "SG16"
1483 PG III	In column (16b), move "SGG16" above "SG16"
1491	In column (16b), move "SGG16" above "SG16"
1504	In column (16b), move "SGG16" above "SG16"
1509	In column (16b), move "SGG16" above "SG16"
1512	In column (16b), delete "SGG2", "SGG7" and "SGG12"
1515	In column (16b), move "SGG14" above "SG7"
1516	In column (16b), move "SGG16" above "SG16"
1541	In column (15), replace "S-A" with " <u>S-A</u> "
1547	In column (15), replace "S-A" with " <u>S-A</u> "
1565	In column (15), replace "S-A" with " <u>S-A</u> "
1569	In column (15), replace "S-D" with "S-D"
1571	In column (16b), move "SGG17" above "SG7"
1573	In column (15), replace "S-A" with " <u>S-A</u> "
1574	In column (15), replace "S-A" with " <u>S-A</u> "
1575	In column (15), replace "S-A" with " <u>S-A</u> "
1577	In column (15), replace "S-A" with " <u>S-A</u> "
1580	In column (15), replace "S-A" with " <u>S-A</u> "
1585	In column (15), replace "S-A" with " <u>S-A</u> "
1586	In column (15), replace "S-A" with " <u>S-A</u> "
1587	In column (15), replace "S-A" with " <u>S-A</u> "
1588 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
1588 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
1588 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
1590	In column (15), replace "S-A" with " <u>S-A</u> "
1598	In column (15), replace "S-A" with " <u>S-A</u> "
1599 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
1599 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
1600	In column (15), replace "S-A" with " <u>S-A</u> "
1606	In column (15), replace "S-A" with " <u>S-A</u> "
1607	In column (15), replace "S-A" with " <u>S-A</u> "
1608	In column (15), replace "S-A" with " <u>S-A</u> "
1611	In column (15), replace "S-A" with " <u>S-A</u> "

<b>UN No.</b>	<b>Amendment</b>
1613	In column (15), replace "S-A" with " <u>S-A</u> "
1616	In column (15), replace "S-A" with " <u>S-A</u> "
1617	In column (15), replace "S-A" with " <u>S-A</u> "
1618	In column (15), replace "S-A" with " <u>S-A</u> "
1620	In column (15), replace "S-A" with " <u>S-A</u> "
1621	In column (15), replace "S-A" with " <u>S-A</u> "
1622	In column (15), replace "S-A" with " <u>S-A</u> "
1623	In column (15), replace "S-A" with " <u>S-A</u> "
1624	In column (15), replace "S-A" with " <u>S-A</u> "
1625	In column (15), replace "S-A" with " <u>S-A</u> "
1626	In column (15), replace "S-A" with " <u>S-A</u> "
1627	In column (15), replace "S-A" with " <u>S-A</u> "
1629	In column (15), replace "S-A" with " <u>S-A</u> "
1630	In column (15), replace "S-A" with " <u>S-A</u> "
1631	In column (15), replace "S-A" with " <u>S-A</u> "
1634	In column (15), replace "S-A" with " <u>S-A</u> "
1636	In column (15), replace "S-A" with " <u>S-A</u> "
1637	In column (15), replace "S-A" with " <u>S-A</u> "
1638	In column (15), replace "S-A" with " <u>S-A</u> "
1639	In column (15), replace "S-A" with " <u>S-A</u> "
1640	In column (15), replace "S-A" with " <u>S-A</u> "
1641	In column (15), replace "S-A" with " <u>S-A</u> "
1642	In column (15), replace "S-A" with " <u>S-A</u> "
1643	In column (15), replace "S-A" with " <u>S-A</u> "
1644	In column (15), replace "S-A" with " <u>S-A</u> "
1645	In column (15), replace "S-A" with " <u>S-A</u> "
1646	In column (15), replace "S-A" with " <u>S-A</u> "
1647	In column (15), replace "S-A" with " <u>S-A</u> "
1649	In column (15), replace "S-A" with " <u>S-A</u> "
1653	In column (15), replace "S-A" with " <u>S-A</u> "
1669	In column (15), replace "S-A" with " <u>S-A</u> "
1670	In column (15), replace "S-A" with " <u>S-A</u> "
1674	In column (15), replace "S-A" with " <u>S-A</u> "
1679	In column (15), replace "S-A" with " <u>S-A</u> "
1680	In column (15), replace "S-A" with " <u>S-A</u> "
1683	In column (15), replace "S-A" with " <u>S-A</u> "
1684	In column (15), replace "S-A" with " <u>S-A</u> "
1687	In column (16b), move "SGG17" above "SG15"
1689	In column (15), replace "S-A" with " <u>S-A</u> "
1692	In column (15), replace "S-A" with " <u>S-A</u> "
1695	In column (15), replace "S-C" with " <u>S-C</u> "
1698	In column (15), replace "S-A" with " <u>S-A</u> "
1699	In column (15), replace "S-A" with " <u>S-A</u> "
1702	In column (15), replace "S-A" with " <u>S-A</u> "
1704	In column (15), replace "S-A" with " <u>S-A</u> "
1707	In column (15), replace "S-A" with " <u>S-A</u> "
1708	In column (15), replace "S-A" with " <u>S-A</u> "
1712	In column 2, replace "and" with "AND"
1713	In column (15), replace "S-A" with " <u>S-A</u> "
1739	In column (15), replace "S-B" with " <u>S-B</u> "
1748	In column 16b, add "SGG8"

<b>UN No.</b>	<b>Amendment</b>
PG III	
1753	In column (15), replace "S-B" with " <u>S-B</u> "
1758	In column 17, delete the sentence: "In the presence of moisture, highly corrosive to most metals."
1761 PG II	In column (15), replace "S-B" with " <u>S-B</u> "
1761 PG III	In column (15), replace "S-B" with " <u>S-B</u> "
1766	In column (15), replace "S-B" with " <u>S-B</u> "
1791 PG II	In column (15), replace "S-B" with " <u>S-B</u> "
1791 PG III	In column (15), replace "S-B" with " <u>S-B</u> "
1840	In column (15), replace "S-B" with " <u>S-B</u> "
1843	In column (15), replace "S-A" with " <u>S-A</u> "
1846	In column (15), replace "S-A" with " <u>S-A</u> "
1889	In column (15), replace "S-B" with " <u>S-B</u> "
1892	In column (15), replace "S-A" with " <u>S-A</u> "
1894	In column (15), replace "S-A" with " <u>S-A</u> "
1895	In column (15), replace "S-A" with " <u>S-A</u> "
1897	In column (15), replace "S-A" with " <u>S-A</u> "
1935 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
1935 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
1935 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2014	In column (16b), move "SGG16" above "SG16"
2015	In column (16b), move "SGG16" above "SG16"
2023	In column (15), replace "S-D" with " <u>S-D</u> "
2024 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2024 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2024 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2025 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2025 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2025 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2026 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2026 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2026 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2029	In column (16b), move "SGG18" above "SG5"
2038	In column (15), replace "S-A" with " <u>S-A</u> "
2046	In column (15), replace "S-D" with " <u>S-D</u> "
2057	In column (15), replace "S-D" with " <u>S-D</u> "

UN No.	Amendment
PG II	
2057 PG III	In column (15), replace "S-D" with " <u>S-D</u> "
2216	In column 6, delete "945"
2218	In column (15), replace "S-C" with " <u>S-C</u> "
2235	In column (15), replace "S-A" with " <u>S-A</u> "
2237	In column (15), replace "S-A" with " <u>S-A</u> "
2241	In column (15), replace "S-D" with " <u>S-D</u> "
2277	In column 17, replace the words "Explosive limits: 1.8% to ..." with "Lower explosive limit: 1.8%."
2279	In column (15), replace "S-A" with " <u>S-A</u> "
2291	In column (15), replace "S-A" with " <u>S-A</u> "
2294	In column (15), replace "S-A" with " <u>S-A</u> "
2296	In column (15), replace "S-D" with " <u>S-D</u> "
2306	In column (15), replace "S-A" with " <u>S-A</u> "
2307	In column (15), replace "S-A" with " <u>S-A</u> "
2310	In column 17, replace the words "Explosive limits: 1.7% to ..." with "Lower explosive limit: 1.7%."
2315	In column (15), replace "S-A" with " <u>S-A</u> "
2316	In column (15), replace "S-A" with " <u>S-A</u> "
2317	In column (15), replace "S-A" with " <u>S-A</u> "
2321	In column (15), replace "S-A" with " <u>S-A</u> "
2322	In column (15), replace "S-A" with " <u>S-A</u> "
2325	In column (15), replace "S-D" with " <u>S-D</u> "
2331	In column (15), replace "S-B" with " <u>S-B</u> "
2338	In column 17, replace the words "Explosive limits: 2.1% to ..." with "Lower explosive limit: 2.1%."
2345	In column 17, replace the words "Explosive limits: 3% to ..." with "Lower explosive limit: 3%."
2362	In column 17, replace the words "Explosive limits: 5.6% to ..." with "Lower explosive limit: 5.6%."
2363	In column (15), replace "S-D" with " <u>S-D</u> "
2381	In column (15), replace "S-D" with " <u>S-D</u> "
2382	In column (15), replace "S-D" with " <u>S-D</u> ", and in column (16b), move "SGG18" above "SG17"
2384	In column 17, replace the words "Explosive limits: 1.7% to ..." with "Lower explosive limit: 1.7%."
2404	In column 17, replace the words "Explosive limits: 3.1% to ..." with "Lower explosive limit: 3.1%."
2411	In column 17, replace the words "Explosive limits: 1.6% to ..." with "Lower explosive limit: 1.6%."
2433	In column (15), replace "S-A" with " <u>S-A</u> "
2466	In column (16b), move "SGG16" above "SG16"
2471	In column (15), replace "S-A" with " <u>S-A</u> "
2504	In column (15), replace "S-A" with " <u>S-A</u> "
2514	In column (15), replace "S-D" with " <u>S-D</u> "
2515	In column (15), replace "S-A" with " <u>S-A</u> "
2516	In column (15), replace "S-A" with " <u>S-A</u> "
2518	In column (15), replace "S-A" with " <u>S-A</u> "
2545 PG I	In column 16b, insert "SGG15"

<b>UN No.</b>	<b>Amendment</b>
2545 PG II	In column 16b, insert "SGG15"
2545 PG III	In column 16b, insert "SGG15"
2547	In column (16b), move "SGG16" above "SG16"
2558	In column (15), replace "S-D" with " <u>S-D</u> "
2567	In column (15), replace "S-A" with " <u>S-A</u> "
2574	In column (15), replace "S-A" with " <u>S-A</u> "
2612	In column 17, replace the words "Explosive limits: 2% to ..." with "Lower explosive limit: 2%."
2651	In column (15), replace "S-A" with " <u>S-A</u> "
2672	In column (15), replace "S-B" with " <u>S-B</u> "
2683	In column (16b), move "SGG18" above "SG2"
2709	In column (15), replace "S-D" with " <u>S-D</u> "
2777 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2777 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2777 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2778 PG I	In column (15), replace "S-D" with " <u>S-D</u> "
2778 PG II	In column (15), replace "S-D" with " <u>S-D</u> "
2786 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2786 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2786 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2787 PG I	In column (15), replace "S-D" with " <u>S-D</u> "
2787 PG II	In column (15), replace "S-D" with " <u>S-D</u> "
2788 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
2788 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
2788 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
2826	In column (15), replace "S-C" with " <u>S-C</u> "
2842	In column 17, replace the words "Explosive limits: 3.4% to ..." with "Lower explosive limit: 3.4%."
3011 PG I	In column (15), replace "S-D" with " <u>S-D</u> "
3011 PG II	In column (15), replace "S-D" with " <u>S-D</u> "
3011 PG III	In column (15), replace "S-D" with " <u>S-D</u> "
3012 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
3012	In column (15), replace "S-A" with " <u>S-A</u> "



UN No.	Amendment
PG II	
3012 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
3019 PG I	In column (15), replace "S-D" with " <u>S-D</u> "
3019 PG II	In column (15), replace "S-D" with " <u>S-D</u> "
3019 PG III	In column (15), replace "S-D" with " <u>S-D</u> "
3020 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
3020 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
3020 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
3073	In column (16b), move "SGG18" above "SG5"
3090	In column 17, replace the existing text with the following: "Electrical batteries containing lithium encased in a rigid metallic body. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants."
3091	In column 17, replace "See above." with "Electrical batteries containing lithium encased in a rigid metallic body. Lithium batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants."
3146 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
3146 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
3146 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
3149	In column (16b), move "SGG16" above "SG16"
3151	In column (15), replace "S-A" with " <u>S-A</u> "
3152	In column (15), replace "S-A" with " <u>S-A</u> "
3155	In column (15), replace "S-A" with " <u>S-A</u> "
3219 PG II	In column 6, insert "900"
3294	In column (15), replace "S-D" with " <u>S-D</u> "
3389	In column 17, replace "See entry above." with "A variety of toxic liquids which present a highly toxic inhalation hazard as well as being corrosive. Highly toxic if swallowed, by skin contact or by inhalation."
3413 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
3413 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
3413 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
3414 PG I	In column (15), replace "S-A" with " <u>S-A</u> "
3414 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
3414	In column (15), replace "S-A" with " <u>S-A</u> "

UN No.	Amendment
PG III	
3424 PG II	In column (15), replace "S-A" with " <u>S-A</u> "
3424 PG III	In column (15), replace "S-A" with " <u>S-A</u> "
3427	In column (15), replace "S-A" with " <u>S-A</u> "
3431	In column (15), replace "S-A" with " <u>S-A</u> "
3432	In column (15), replace "S-A" with " <u>S-A</u> "
3441	In column (15), replace "S-A" with " <u>S-A</u> "
3442	In column (15), replace "S-A" with " <u>S-A</u> "
3450	In column (15), replace "S-A" with " <u>S-A</u> "
3451	In column (15), replace "S-A" with " <u>S-A</u> "
3454	In column (15), replace "S-A" with " <u>S-A</u> "
3457	In column (15), replace "S-A" with " <u>S-A</u> "
3483	In column (15), replace "S-D" with " <u>S-D</u> "
3484	In column (16b), move "SGG18" above "SG5"
3543	In column 2, replace the existing proper shipping name to read "ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S."

### Chapter 3.3

#### Special provisions applicable to certain substances, materials or articles

##### Special provisions

- SP63 In the second paragraph, replace "D 240" with "D240".
- SP133 In the last sentence, replace "7.2.3.3, 7.1.3.1 and 7.1.4.4" with "7.1.3.1, 7.1.4.4 and 7.2.3.3".
- SP188 Move the last two sentences ("When packages are placed in an overpack, the lithium battery mark shall either be clearly visible or be reproduced on the outside of the overpack and the overpack shall be marked with the word "OVERPACK". The lettering of the "OVERPACK" mark shall be at least 12 mm high;") from sub-paragraph .5 to the end of sub-paragraph .6. In sub-paragraphs .7 and .8 replace "Except when batteries" with "Except when cells or batteries".
- SP241 In the second sentence, replace the words "test No. 1" with the words "test N.1".
- SP362 In the first sentence, replace the words "2.2.1.2.1 or 2.2.1.2.2" with "2.2.1.1 and 2.2.1.2.1 or 2.2.1.2.2".
- SP392 In the entry for ECE Regulation No. 110, in the first sentence, after the words "concerning", add the words "the approval of".

In the entry for ECE Regulation No. 134, replace the text "Hydrogen and fuel cell vehicles (HFCV)" with the following text:

"Uniform provisions concerning the approval of motor vehicles and their components with regards to the safety-related performance of hydrogen-fuelled vehicles (HFCV)".

In sub-paragraph .2, in Note 1, replace the words "standard ISO 11623:2015 *Transportable gas cylinders – Periodic inspection and testing of composite gas cylinders*" with the words "standard ISO 11623:2015 *Gas cylinders – Composite construction – Periodic inspection and testing*".

## PART 4 PACKING AND TANK PROVISIONS

### Chapter 4.1 Use of packagings, including intermediate bulk containers (IBCs) and large packagings

#### 4.1.1 General provisions for the packing of dangerous goods in packagings, including IBCs and large packagings

4.1.1.2 At the end of sub-paragraph .1, delete "and".

#### 4.1.4 List of packing instructions

##### 4.1.4.1 Packing instructions concerning the use of packagings (except IBCs and large packagings)

P200 In the table 2: LIQUEFIED GASES AND DISSOLVED GASES, with regard to UN No.1082, in the column for proper shipping name, after the word "STABILIZED", add "(REFRIGERANT GAS R 1113)".

P206 Amend paragraph (3) as follows:

In the first paragraph, replace "liquefied-gas" with "liquid".

In sub-paragraph (a), replace "liquefied-gas" with "liquid".

In sub-paragraph (d), replace "liquefied-gas" with "liquid".

In sub-paragraph (e), replace "liquefied-gas" with "liquid".

P907 In the second paragraph, second sentence, replace "filling density" with "filling ratio".

P909 In the fourth indent of "Additional requirements" 2 and in "Additional requirements" 3, replace "non-conductive" with "electrically non-conductive".

P910 In the fourth indent of "Additional requirements", replace "non-conductive" with "electrically non-conductive."

##### 4.1.4.2 Packing instructions concerning the use of IBCs

IBC08 B21 Replace "For substances, UN Nos. 1374, 2590 and 3535 in IBCs other than metal or rigid plastics IBCs" with "For solid substances in IBCs other than metal or rigid plastics IBCs".

IBC520 For UN 3109, in the column for "Organic peroxide", amend the entries as follows:

For the entry "*tert*-Butyl peroxyacetate, not more than 32% in diluent type A", add "31A" in "Type of IBC" column and add "1250" in "Maximum quantity (litres)" column.

For the entry "3,6,9-Triethyl-3,6,9-trimethyl-1,4,7-triperoxonane not more than 27% in diluent type A", add "," after "-triperoxonane".

For UN 3119, replace the sequence of the first two entries as follows:

UN No.	Organic peroxide	Type of IBC	Maximum quantity (litres)	Control temperature	Emergency temperature
3119	<i>tert</i> -Amyl peroxy-2-ethylhexanoate, not more than 62% in diluent type A	31HA1	1000	+15°C	+20°C
	<i>tert</i> -Amyl peroxy-pivalate, not more than 32% in diluent type A	31A	1250	+10°C	+15°C

#### 4.1.4.3 Packing instructions concerning the use of large packagings

LP903 In the second sentence, delete the words "cells or".

LP905 In the introductory sentence, replace "cells and batteries" with "cells or batteries" (twice).

In paragraph (2), after the word "equipment", add the words "containing cells or batteries".

LP906 In the second sentence, after the first paragraph, delete the words "cells or".

## Chapter 4.2

### Use of portable tanks and multiple-element gas containers (MEGCs)

#### 4.2.5 Portable tank instructions and special provisions

##### 4.2.5.3 Portable tank special provisions

TP10 In the second sentence, replace "beyond the date of expiry of the last testing" with "beyond that date".

#### 4.2.6 Additional provisions for the use of road tank vehicles and road gas elements vehicles

4.2.6.2 In the second sentence, replace "and 8" with ",8 and 9".

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## PART 5 CONSIGNMENT PROCEDURES

### Chapter 5.1 General provisions

#### 5.1.1 Application and general provisions

5.1.1 Move note from the end to the end of 5.1.1.2.

#### 5.1.5 General provisions for class 7

##### 5.1.5.1.2 Shipment approvals

In paragraph .4, replace "7.1.4.5.7" with "7.1.4.5.8".

##### 5.1.5.3 Determination of transport index (TI) and criticality safety index (CSI)

In table 5.1.5.3.4, in footnote "b", replace "(see table 7.1.4.5.3)" with "(see table in 7.1.4.5.3.1)".

### Chapter 5.2 Marking and labelling of packages including IBCs

#### 5.2.2 Labelling of packages including IBCs

##### 5.2.2.1 Labelling provisions

##### 5.2.2.1.12 Special provisions for the labelling of radioactive material

5.2.2.1.12.1 Delete the third sentence "Each overpack ... the outside of the overpack."

##### 5.2.2.2 Provisions for labels

5.2.2.2.2 In the table for "Specimen labels":

- .1 for label model no. 2, second column, delete "(except as provided for in 5.2.2.2.1.6.4)";
- .2 for label model no. 2, third column, under "Flame: black or white", add "(except as provided for in 5.2.2.2.1.6.4)";
- .3 for label model no. 2, fifth column, under "(black or white)", add "(except as provided for in 5.2.2.2.1.6.4)";
- .4 for label model no. 4.1, second column, replace "Flammable solids, self-reactive substances, solid desensitized explosives and polymerizing substances" with "Flammable solids, self-reactive substances, polymerizing substances and solid desensitized explosives";
- .5 for label model no. 7A, second column, replace " Category I" with "Category I – WHITE";

- .6 for label model no. 7B, second column, replace "Category II" with "Category II – YELLOW"; and
- .7 for label model no. 7C, second column, replace "Category III" with "Category III – YELLOW".

## **Chapter 5.4 Documentation**

### **5.4.1 Dangerous goods transport information**

#### **5.4.1.5 Information required in addition to the dangerous goods description**

##### **5.4.1.5.11 Special provisions for segregation**

5.4.1.5.11.1 Replace the text in paragraph to read as follows:

"For substances, mixtures, solutions or preparations classified under N.O.S. entries not included in the segregation groups listed in 3.1.4.4 but belonging, in the opinion of the consignor, to one of these groups (see 3.1.4.2), the appropriate segregation group name or segregation group code (SGG) listed in 7.2.5.2 preceded by the phrase "IMDG Code segregation group" shall be included in the transport document after the dangerous goods description.  
For example:

- "UN 1760 CORROSIVE LIQUID, N.O.S. (Phosphoric acid, acetic acid) 8 III IMDG Code segregation group 1 – Acids"; or
- "UN 1760 CORROSIVE LIQUID, N.O.S. (Phosphoric acid, acetic acid) 8 III IMDG Code segregation group SGG1."

5.4.1.5.11.3 Replace "7.2.6.4" with "7.2.6.5" (twice).

### **5.4.5 Multimodal Dangerous Goods Form**

5.4.5.1 In the third sentence, replace "container packing certificate" with "container/vehicle packing certificate".

## **PART 6 CONSTRUCTION AND TESTING OF PACKAGINGS, INTERMEDIATE BULK CONTAINERS (IBCs), LARGE PACKAGINGS, PORTABLE TANKS, MULTIPLE-ELEMENT GAS CONTAINERS (MEGCs) AND ROAD TANK VEHICLES**

### **Chapter 6.2 Provisions for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas**

#### **6.2.2 Provisions for UN pressure receptacles**

**6.2.2.1 Design, construction and initial inspection and test**

6.2.2.1.8 For reference "ISO 18172-1:2007", in column "Applicable for manufacture", add "Until further notice".

**6.2.2.4 Periodic inspection and test**

6.2.2.4 In the tables of standards, move ISO 16111:2008 from the first table to the second table and move ISO 10460:2005 to the first table as second row.

**6.2.2.7 Marking of refillable UN pressure receptacles**

6.2.2.7.2 In sub-paragraph (c), after "as" insert "indicated by".

6.2.2.7.4 In sub-paragraph (n), after "the country of manufacture as" insert "indicated by".

6.2.2.7.7 In sub-paragraph (a), after "as" insert "indicated by".

**6.2.2.9 Marking of UN metal hydride storage systems**

6.2.2.9.2 In sub-paragraph (c), after "as" insert "indicated by" and in sub-paragraph (h), after "country of manufacture as" insert "indicated by".

6.2.2.9.4 In sub-paragraph (a), in the first sentence, after "as" insert "indicated by".

**Chapter 6.7****Provisions for the design, construction, inspection and testing of portable tanks and multiple-element gas containers (MEGCs)****6.7.2 Provisions for the design, construction, inspection and testing of portable tanks intended for the transport of substances of class 1 and classes 3 to 9****6.7.2.3 Design criteria**

6.7.2.3.2 In the second sentence, replace "4.2.5" with "4.2.5.2.6".

**Chapter 6.9****Provisions for the design, construction, inspection and testing of bulk containers****6.9.5 Requirements for the design, construction, inspection and testing of flexible bulk containers BK3****6.9.5.5 Marking**

6.9.5.5.1 In sub-paragraph (e), after "as" insert "indicated by".

**PART 7**  
**PROVISIONS CONCERNING TRANSPORT OPERATIONS**

**Chapter 7.1**  
**General stowage provisions**

**7.1.4 Special stowage provisions**

7.1.4.7 In the beginning of the sentence, replace "Substances" with "For substances".

**Chapter 7.2**  
**General segregation provisions**

**7.2.6 Special segregation provisions and exemptions**

7.2.6.4 Replace "7.2.6.3.2.4" with "7.2.6.3.4".

**7.2.8 Segregation codes**

In the table, for SG67, replace the words "compartment of hold" with the words "compartment or hold".

In the table, replace "SG 74" with "SG74", replace "SG 75" with "SG75", replace "SG 76" with "SG76", replace "SG 77" with "SG77" and replace "SG 78" with "SG78".

**Chapter 7.4**  
**Stowage and segregation on containerships**

**7.4.3 Segregation requirements**

7.4.3.1.2 Replace the text in paragraph with the following:

"The provisions for segregation between containers on board containerships with closed cargo holds and on board hatchless containerships are given in the tables in 7.4.3.2 and 7.4.3.3, respectively."

**Chapter 7.6**  
**Stowage and segregation on general cargo ships**

**7.6.3 Segregation provisions**

7.6.3.1.2 Replace the words "having a reference to 7.6.3.1.2 in column 16b" with the words "for which it is referred to in segregation code SG29 or SG50 in column 16b".

**Chapter 7.9**  
**Exemptions, approvals and certificates**

**7.9.3 Contact information for the main designated national competent authorities**

For France, at the end, add the following text:



*"Competent authority for issuing agreements for class 7 packages containing radioactive materials:*

Autorité de Sûreté Nucléaire (ASN)  
15, rue Louis Lejeune  
CS 70013  
F-92541 Montrouge Cedex  
FRANCE  
Phone: +33 (0)1 46 16 41 09  
Email: [dts - transport@asn.fr](mailto:dts-transport@asn.fr)".

## APPENDICES

### Appendix A

#### List of generic and N.O.S. proper shipping names

In the table, for class 4.3, for UN 3543, in the column for "Proper shipping name", replace "ARTICLES CONTAINING A SUBSTANCE WHICH EMITS FLAMMABLE GAS IN CONTACT WITH WATER, N.O.S." with "ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S."

In the table, for class 5.2, after the entry UN 3120, in column "Proper shipping name", insert the words "General entries".

In the table, for class 6.1, under "Specific entries", delete the entry for UN 3462, TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.

### Appendix B

#### Glossary of terms

In the entry "ARTICLES, EXPLOSIVE, EXTREMELY INSENSITIVE (ARTICLES, EEI)", replace the words "Articles that contain only extremely insensitive substances" with the words "Articles that predominantly contain extremely insensitive substances".

## INDEX

Replace "ARTICLES CONTAINING A SUBSTANCE WHICH EMITS FLAMMABLE GAS IN CONTACT WITH WATER, N.O.S." with the following:

"ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S."

In the column for "Substance, material or article", after the words "DI-(4-*tert*-butylcyclohexyl) peroxydicarbonate", insert the words "(concentration ≤ 42%, as a paste)".

In the column for "Substance, material or article", after the words "Diisobutyl peroxide", insert the words "(concentration ≤ 42%, as a stable dispersion in water)".

In the column for "Substance, material or article", after the words "1-Phenylethyl hydroperoxide", insert the words "(concentration ≤ 38%, with diluent Type B)".

In the column for "Substance, material or article", after the words "Phosphorothioic acid, *o*-[(cyanophenyl methylene) azanyl] *o*,*o*-diethyl ester", insert the words "(concentration 82-91% (Z isomer))".