

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the
Transport of Dangerous Goods

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Item 3 of the provisional agenda

LISTING, CLASSIFICATION AND PACKING

Assignment of SP 274

Transmitted by Cefic (European Chemical Industry Council)

Discussion

In the Joint RID/ADR/ADN Meeting, Cefic initiated a discussion on why there were discrepancies between the assignments of SP 274 (which requires the proper shipping name to be supplemented with the technical name) in RID/ADR/ADN on the one hand, and the UN Model Regulations, the IMDG Code and the ICAO IT on the other hand. Cefic had identified 128 entries for which RID/ADR/ADN requires SP 274, whereas UN, IMDG and ICAO do not.

In an effort to harmonise provisions between modes, Cefic requested comments on why SP 274 should be maintained, and convened an informal Working Group to review and discuss the comments received. In annex is the draft report of this Working Group meeting, which indicates for each of the 128 entries whether SP 274 is required or not, based on general principles.

The intention of the Working Group is to present its report at the next Joint Meeting in March 2008 and proposing to remove SP 274 from these entries in RID/ADR/ADN for which there is no longer a requirement. This would achieve already part of the harmonisation without any impact on the UN Model Regulations and the other modal regulations.

However, full harmonisation will only be achieved if the UN Model Regulations (and subsequently the other modal regulations) would also assign SP 274 to those entries for which the Working Group considers that SP 274 is indeed required.

Proposal

As the UNSCETDG is the most adequate forum to achieve harmonisation, Cefic and the Working Group would appreciate getting already some views on its proposals, listed in the following draft report, so that these could be incorporated in the final report that will be presented to the Joint Meeting in March 2008.

Comments are welcome on:

- the assignment of SP 274 in the UN Model Regulations to a number of entries i.e. those entries that are not shaded in the Annex to the report
- the justifications given for the different groups of substances
- the possible incorporation of the text of SP 559-604-605-606-608 in the UN Model Regulations

It may be appropriate to consider in the discussion which criteria should generally apply for the assignment of SP 274 to a UN entry in the UN Model Regulations.

These could then possibly be incorporated in the Guiding Principles in order to guarantee a consistent application.

Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods

REPORTS OF INFORMAL WORKING GROUPS

Draft report of the informal working group on SP 274

Transmitted by Cefic on behalf of the working group

Background

At the Joint Meeting of March 2007 Cefic presented document [ECE/TRANS/WP.15/AC.1/2007/15](#) which pointed to the differences in the assignment of SP 274 (which requires the PSN to be supplemented with the technical name) between the modal regulations. RID/ADR/ADN indeed assigns SP 274 to more UN entries than the UN Model Regulations, the IMDG Code and ICAO TI. At the meeting opinions were divided and Cefic agreed to coordinate the work of a correspondence group that would verify, on a case-by-case basis, whether there were grounds for retaining or removing special provision 274 in RID/ADR/ADN for entries to which it was not assigned in the UN Model Regulations. Input was received from Austria, Belgium, Germany, Italy, Portugal, Switzerland and United Kingdom.

The result of this work was presented as [ECE/TRANS/WP.15/AC.1/2007/43](#) and [INF.3](#) (the detailed list of substances with received comments) at the Joint Meeting of September 2007, and although there were some informal discussions, it was not possible to progress further. Cefic therefore organized an informal Working Group that met on 24 October 2007 and which was attended by representatives from Austria, Belgium, France, Germany, Netherlands, the United Kingdom and Cefic.

Structure of the discussion

In order to have an effective discussion, the comments, which requested keeping SP 274 in RID/ADR/ADN, were grouped as follows:

- a) Comments related to the link with Special Provisions, which deal with classification and for which the removal of SP 274, could lead to substances being classified wrongly or being carried despite being prohibited.
- b) Comments related to the need of information for stowage and segregation purposes in the IMDG Code
- c) Comments related to the need for the technical name, especially for toxic substances
- d) Specific comment on UN 1075 (Petroleum gases)
- e) Comments related to medicines (UN 1851-3248-3249)
- f) Comments related to gas samples (UN 3167-3168-3169)
- g) Comments related to metal catalysts (UN 1378-2881)
- h) Specific comment on inorganic peroxides (UN 1483)
- i) Comments on elevated temperature substances (UN 3256-3257-3258)

Discussion

a) Link with Special Provisions, which deal with classification

The majority view was to require SP 274 for those UN numbers for which a SP indicated that the carriage of a certain substance, corresponding to the description of the UN number, is prohibited. The SP's envisaged are SP 103-559-604-605-606-608: they have been shaded in green in the table below. Justification: this helps carriers (see ADR 1.4.2.2.1a) and enforcement officers to check if the goods were authorised for carriage. Additionally it provides an extra reminder to consignors.

It should be noted that the substances mentioned in these SP's correspond to those also listed in SP 900 of the IMDG Code (indicated in the table below), and in Table 2.1A of the IATA DGR, which both prohibit the transport of certain substances by respectively sea and air.

The other SP's (all in the "500" range) do not relate to the prohibition of carriage but are a user-friendly reminder that substances should be classified in the appropriate class under the appropriate UN number.

SP	Text (RID/ADR 2007)	Applies to UN number
103	The carriage of ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt is prohibited.	2627-3219 (SP 900)
502	UN No. 2006 plastics, nitrocellulose-based, self-heating, n.o.s., and 2002 celluloid scrap are substances of Class 4.2.	1353
505	UN No. 2004 magnesium diamide is a substance of Class 4.2.	1390
506	Alkaline earth metals and alkaline earth metal alloys in pyrophoric form are substances of Class 4.2. UN No. 1869 magnesium or magnesium alloys containing more than 50% magnesium as pellets, turnings or ribbons, are substances of Class 4.1	1391-1392- 1393-3402
511	UN No. 1625 mercuric nitrate, UN No. 1627 mercurous nitrate and UN No. 2727 thallium nitrate are substances of Class 6.1. Thorium nitrate, solid, uranyl nitrate hexahydrate solution and uranyl nitrate, solid are substances of Class 7	1477-3218
512	UN No. 1730 antimony pentachloride, liquid, UN No. 1731 antimony pentachloride solution, UN No. 1732 antimony pentafluoride and UN No. 1733 antimony trichloride are substances of Class 8	1549-3141
513	UN No. 0224 barium azide, dry or wetted with less than 50% water, by mass, is a substance of Class 1. UN No. 1571 barium azide, wetted with not less than 50% water, by mass, is a substance of Class 4.1. UN No. 1854 barium alloys, pyrophoric, are substances of Class 4.2. UN No. 1445 barium chlorate, solid, UN No. 1446 barium nitrate, UN No. 1447 barium perchlorate, solid, UN No. 1448 barium permanganate, UN No. 1449 barium peroxide, UN No. 2719 barium bromate, UN No. 2741 barium hypochlorite with more than 22% available chlorine, UN No. 3405 barium chlorate, solution and UN No. 3406 barium perchlorate, solution, are substances of Class 5.1. UN No. 1565 barium cyanide and UN No. 1884 barium oxide are substances of Class 6.1	1564
514	UN No. 2464 beryllium nitrate is a substance of Class 5.1.	1566
515	UN No. 1581 chloropicrin and methyl bromide mixture and UN No. 1582 chloropicrin and methyl chloride mixture are substances of Class 2.	1583
517	UN No. 1690 sodium fluoride, solid, UN No. 1812 potassium fluoride, solid, UN No. 2505 ammonium fluoride, UN No. 2674 sodium fluorosilicate, UN No. 2856 fluorosilicates, n.o.s., UN No. 3415 sodium fluoride, solution and UN No. 3422 potassium fluoride, solution, are substances of Class 6.1	1740
525	Solutions of inorganic cyanides with a total cyanide ion content of more than 30% shall be classified in packing group I, solutions with a total cyanide ion content of more than 3% and not more than 30% in packing group II and solutions with a cyanide ion content of more than 0.3% and not more than 3% in packing group III	1935
529	UN No. 0135 mercury fulminate, wetted with not less than 20% water, or mixture of alcohol and water, by mass, is a substance of Class 1. Mercurous chloride (calomel) is a substance of Class 9 (UN No. 3077).	2025
535	UN No. 1469 lead nitrate, UN No. 1470 lead perchlorate, solid and UN No. 3408 lead perchlorate, solution, are substances of Class 5.1	2291
548	Chlorosilanes which, in contact with water, emit flammable gases, are substances of Class 4.3.	2985-2986- 2987
549	Chlorosilanes having a flash-point of less than 23 °C and which, in contact with water, do not emit flammable gases are substances of Class 3. Chlorosilanes having a flash-point equal to or greater than 23 °C and which, in contact with water, do not emit flammable gases are substances of Class 8	2988

SP	Text (RID/ADR 2007)	Applies to UN number
552	Metals and metal alloys in powdered or other flammable form, liable to spontaneous combustion, are substances of Class 4.2. Metals and metal alloys in powdered or other flammable form which, in contact with water, emit flammable gases are substances of Class 4.3	3089
559	Mixtures of a hypochlorite with an ammonium salt are not to be accepted for carriage. UN No. 1791 hypochlorite solution is a substance of Class 8	3212 (SP 900)
560	UN No. 3257 elevated temperature liquid, n.o.s., at or above 100 °C and, for a substance with a flash-point below its flash-point (including molten metals and molten salts) is a substance of Class 9.	3256
561	Chloroformates having predominantly corrosive properties are substances of Class 8	2742
563	UN No. 1905 selenic acid is a substance of Class 8	3283-3440
564	UN No. 2443 vanadium oxytrichloride, UN No. 2444 vanadium tetrachloride and UN No. 2475 vanadium trichloride are substances of Class 8	3285
585	Cinnabar is not subject to the requirements of ADR	2025
596	Cadmium pigments, such as cadmium sulphides, cadmium sulphoselenides and cadmium salts of higher fatty acids (e.g. cadmium stearate), are not subject to the requirements of ADR	2570
604	Ammonium bromate and its aqueous solutions and mixtures of a bromate with an ammonium salt are not to be accepted for carriage	1450-3213 (SP 900)
605	Ammonium chlorate and its aqueous solutions and mixtures of a chlorate with an ammonium salt are not to be accepted for carriage	1461-3210 (SP 900)
606	Ammonium chlorite and its aqueous solutions and mixtures of a chlorite with an ammonium salt are not to be accepted for carriage	1462 (SP 900)
608	Ammonium permanganate and its aqueous solutions and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage	1482-3214 (SP 900)

b) Need of information for stowage and segregation purposes

All participants agreed that SP 274 is not required for the purpose of stowage and segregation according to the IMDG Code

Justification: the IMDG Code (see 3.1.4.4) has grouped substances into “segregation groups” for assigning segregation provisions so that there is no longer a need for the technical name.

c) Need for the technical name, especially for toxic substances

The majority view was to require SP 274 for all substances of class 6.1 (particularly for PG I substances, as even small amounts can present a major risk, but generally also for PG II and III substances, as this is in line with the current assignment of SP 274 to substances of class 6.1).

Justification: knowledge of the technical name of toxic substances may speed up the provision of appropriate first aid measures as e.g. Poison Centres may more rapidly identify adequate measures.

All participants agreed not to require SP 274 for substances of other classes for which the name was sufficiently clear so that the provision of the technical name would not lead to taking different emergency measures.

d) Specific comment on UN 1075 (Petroleum gases)

All participants agreed that SP 274 should be kept

Justification: without SP 274 it would be impossible to determine the maximum permissible filling ratio.

There was however no need to introduce this requirement at UN level as this is a specific RID/ADR/ADN issue.

Formal alignment with UN could be achieved by incorporating the requirement of SP 274 into SP 583 (“This entry covers, inter alia, mixtures which as Mixture A, have a vapour pressure at 70 °C not exceeding 1.1 MPa (11 bar) and a density at 50 °C not lower than 0.525 kg/l etc.). However, this was not perceived as being a task for this WG.

e) Comments related to medicines (UN 1851-3248-3249)

All participants agreed that SP 247 is required.

Justification: knowledge of the technical name will help to identify proper first aid measures (similar as justification in comment c)

The WG questioned whether SP 220 (“Only the technical name of the flammable liquid component of this solution or mixture shall be shown in parentheses immediately following the proper shipping name”), assigned to UN 3248 (Medicine liquid, flammable, toxic, n.o.s.), needs to be maintained or needs to be amended.

f) Comments related to gas samples (UN 3167-3168-3169)

All participants agreed that there was no need to require SP 274

Justification: the last paragraph of 2.1.4.1 in RID/ADR/ADN explicitly does not require the technical name when an n.o.s. entry is used to carry the sample (which is actually the case for UN 3167-3168-3169!)

g) Comments related to metal catalysts (UN 1378-2881)

All participants agreed that SP 247 is required

Justification: the technical name may provide information that could be important to identify the proper extinguishing medium (e.g. can CO₂ be used?) or the other substances the catalyst could react with

h) Specific comment on inorganic peroxides (UN 1483)

All participants agreed that there was no need to require SP 274

Justification: knowledge of the technical name will not lead to different emergency measures being taken

i) Comments on elevated temperature substances (UN 3256-3257-3258)

There was a majority view to require SP 274

Justification: knowledge of the technical name will help emergency services selecting the proper extinguishing medium (e.g. presence of alcohol in the substance carried) or will help estimating the temperature (e.g. melting point of the substance carried)

The need for requiring SP 274 for aquatic pollutants was briefly discussed but was not considered to be an issue for this WG as the Joint RID/ADR Meeting had recently decided that there was no need for an additional mention of “aquatic pollutant” on the transport document for substances, classified as aquatic pollutant.

For completeness marine pollutants according to paragraph 3.1.2.8.1.3 of the IMDG Code (33-06), have been indicated in the column “IMDG” of the table in Annex.

Conclusion

In accordance with the decisions taken, the assignment of SP 274 was reviewed:

- SP 274 is proposed to be retained in RID/ADR/ADN and proposed to be assigned also to these entries in the UN Model Regulations if either of the following comments apply
 - o Comment a, if also SP 103-559*-604*-605*-606*-608* applies, or
 - o Comment c (substances of class 6.1), or
 - o Comment e (medicines), or
 - o Comment g (metal catalysts), or
 - o Comment i (elevated temperature substances)
- *: it is proposed to take up the contents of these special provisions also in the UN Model Regulations
- SP 274 is proposed to be removed from entries in RID/ADR/ADN if any of the following comments, but none of the comments listed above, applies
 - o Comment b (segregation)
 - o Comment f (gas samples)
 - o Comment h (inorganic peroxide)
- SP 274 is proposed to be retained for UN 1075 in RID/ADR/ADN but not proposed to be assigned to this entry in the UN Model Regulations

ANNEX: List of substances which have SP 274 in RID/ADR/ADN but not in the UN Model Regulations, the IMDG Code or the ICAO TI.

Entries for which it is proposed no longer to require SP 274 in RID/ADR/ADN are shaded.

Short summary of comments (see above for details):

a	Link with “classification” SP	d	Comment for UN 1075	g	Metal catalysts
b	Stowage and segregation	e	Medicines	h	Inorganic peroxides
c	General need for SP 274 (class 6.1)	f	Gas samples	i	Elevated temperature substances

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
1075	PETROLEUM GASES, LIQUEFIED	2		2.1	●	274 583 639	d
1353	FIBRES or FABRICS IMPREGNATED WITH WEAKLY NITRATED NITROCELLULOSE, N.O.S.	4.1	III	4.1	●	274 502	a-c
1373	FIBRES or FABRICS, ANIMAL or VEGETABLE or SYNTHETIC, N.O.S. with oil	4.2	III	4.2	●	274	a-c
1378	METAL CATALYST, WETTED with a visible excess of liquid	4.2	II	4.2	●	274	b-g
1389	ALKALI METAL AMALGAM, LIQUID	4.3	I	4.3	●	182 274	c
1390	ALKALI METAL AMIDES	4.3	II	4.3		182 274 505	a-c
1391	ALKALI METAL DISPERSION or ALKALINE EARTH METAL DISPERSION having a flash-point of not more than 60°C	4.3	I	4.3 +3		182 183 274 506	a-c
1391	ALKALI METAL DISPERSION or ALKALINE EARTH METAL DISPERSION having a flash-point above 60°C	4.3	I	4.3		182 183 274 282 506	a-c
1392	ALKALINE EARTH METAL AMALGAM, LIQUID	4.3	I	4.3	●	183 274 506	a-c
1393	ALKALINE EARTH METAL ALLOY, N.O.S.	4.3	II	4.3	●	183 274 506	a-c
1421	ALKALI METAL ALLOY, LIQUID, N.O.S.	4.3	I	4.3	●	182 274	c
1450	BROMATES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 604	a-b

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
1461	CHLORATES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 605	a-b
1462	CHLORITES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 509 606	a-b
1477	NITRATES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 511	a-b
1477	NITRATES, INORGANIC, N.O.S.	5.1	III	5.1	●	274 511	a-b
1481	PERCHLORATES, INORGANIC, N.O.S.	5.1	II	5.1	●	274	b
1481	PERCHLORATES, INORGANIC, N.O.S.	5.1	III	5.1	●	274	b
1482	PERMANGANATES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 608	a-b
1482	PERMANGANATES, INORGANIC, N.O.S.	5.1	III	5.1	●	274 608	a-b
1483	PEROXIDES, INORGANIC, N.O.S.	5.1	II	5.1	●	274	h
1483	PEROXIDES, INORGANIC, N.O.S.	5.1	III	5.1	●	274	h
1549	ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S.	6.1	III	6.1		45 274 512	a-c
1556	ARSENIC COMPOUND, LIQUID, N.O.S., inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	I	6.1	●	43 274	b-c
1556	ARSENIC COMPOUND, LIQUID, N.O.S., inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	II	6.1	●	43 274	b-c
1556	ARSENIC COMPOUND, LIQUID, N.O.S., inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	III	6.1	●	43 274	b-c
1557	ARSENIC COMPOUND, SOLID, N.O.S., inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	I	6.1	●	43 274	b-c
1557	ARSENIC COMPOUND, SOLID, N.O.S., inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	II	6.1	●	43 274	b-c
1557	ARSENIC COMPOUND, SOLID, N.O.S., inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1	III	6.1	●	43 274	b-c

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
1564	BARIUM COMPOUND, N.O.S.	6.1	II	6.1	●	177 274 513 587	a-c
1564	BARIUM COMPOUND, N.O.S.	6.1	III	6.1	●	177 274 513 587	a-c
1566	BERYLLIUM COMPOUND, N.O.S.	6.1	II	6.1		274 514	a-b-c
1566	BERYLLIUM COMPOUND, N.O.S.	6.1	III	6.1		274 514	a-b-c
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1	I	6.1	●	274 315 515	a-c
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1	II	6.1	●	274 515	a-c
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1	III	6.1	●	274 515	a-c
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1	I	6.1		43 274	c
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1	II	6.1		43 274	c
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1	III	6.1		43 274	c
1740	HYDROGENDIFLUORIDES, N.O.S.	8	II	8	●	274 517	b-c
1740	HYDROGENDIFLUORIDES, N.O.S.	8	III	8	●	274 517	b-c
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1	II	6.1	●	221 274 601	c-e
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1	III	6.1	●	221 274 601	c-e
1935	CYANIDE SOLUTION, N.O.S.	6.1	I	6.1	P	274 525	a-b-c
1935	CYANIDE SOLUTION, N.O.S.	6.1	II	6.1	P	274 525	a-b-c
1935	CYANIDE SOLUTION, N.O.S.	6.1	III	6.1	P	274 525	a-b-c
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	I	6.1	PP	43 274	b-c

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	II	6.1	PP	43 274	b-c
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	III	6.1	PP	43 274	b-c
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	I	6.1	PP	43 274 529 585	a-b-c
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	II	6.1	PP	43 274 529 585	a-b-c
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	III	6.1	PP	43 274 529 585	a-b-c
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	I	6.1	PP	43 274	a-b-c
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	II	6.1	PP	43 274	b
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	III	6.1	PP	43 274	b
2291	LEAD COMPOUND, SOLUBLE, N.O.S.	6.1	III	6.1	P	199 274 535	a-b-c
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	I	8	•	274	c
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	II	8	•	274	c
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	III	8	•	274	c
2570	CADMIUM COMPOUND	6.1	I	6.1	•	274 596	a-b-c
2570	CADMIUM COMPOUND	6.1	II	6.1	•	274 596	a-b-c
2570	CADMIUM COMPOUND	6.1	III	6.1	•	274 596	a-b-c
2583	ALKYLSULPHONIC ACIDS, SOLID or ARYLSULPHONIC ACIDS, SOLID with more than 5% free sulphuric acid	8	II	8		274	c
2584	ALKYLSULPHONIC ACIDS, LIQUID or ARYLSULPHONIC ACIDS, LIQUID with more than 5% free sulphuric acid	8	II	8		274	b

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
2585	ALKYLSULPHONIC ACIDS, SOLID or ARYLSULPHONIC ACIDS, SOLID with not more than 5% free sulphuric acid	8	III	8		274	c
2586	ALKYLSULPHONIC ACIDS, LIQUID or ARYLSULPHONIC ACIDS, LIQUID with not more than 5% free sulphuric acid	8	III	8		274	b
2627	NITRITES, INORGANIC, N.O.S.	5.1	II	5.1	●	103 274	b
2630	SELENATES or SELENITES	6.1	I	6.1	●	274	b-c
2742	CHLOROFORMATES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	II	6.1 +3 +8	●	274 561	a-c
2837	BISULPHATES, AQUEOUS SOLUTION	8	II	8	●	274	b
2837	BISULPHATES, AQUEOUS SOLUTION	8	III	8	●	274	b
2856	FLUROSILICATES, N.O.S.	6.1	III	6.1	●	274	b
2881	METAL CATALYST, DRY	4.2	I	4.2		274	b-c-g
2881	METAL CATALYST, DRY	4.2	II	4.2		274	b-c-g
2881	METAL CATALYST, DRY	4.2	III	4.2		274	b-c-g
2985	CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.	3	II	3 +8	●	274 548	a-c
2986	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.	8	II	8 +3	●	274 548	a-c
2987	CHLOROSILANES, CORROSIVE, N.O.S.	8	II	8	●	274 548	a-c
2988	CHLOROSILANES, WATER- REACTIVE, FLAMMABLE, CORROSIVE, N.O.S.	4.3	I	4.3 +3 +8	●	274 549	a-c
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1	II	4.1	●	274 552	a-b-c
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1	III	4.1	●	274 552	a-b-c
3141	ANTIMONY COMPOUND, INORGANIC, LIQUID, N.O.S.	6.1	III	6.1		45 274 512	a-b-c
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1	I	6.1		43 274	c
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1	II	6.1		43 274	c
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1	III	6.1		43 274	c

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	I	8	●	274	b
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	II	8	●	274	b
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	III	8	●	274	b
3167	GAS SAMPLE, NON- PRESSURIZED, FLAMMABLE, N.O.S., not refrigerated liquid	2		2.1	●	274	f
3168	GAS SAMPLE, NON- PRESSURIZED, TOXIC, FLAMMABLE, N.O.S., not refrigerated liquid	2		2.3 +2.1	●	274	f
3169	GAS SAMPLE, NON- PRESSURIZED, TOXIC, N.O.S., not refrigerated liquid	2		2.3	●	274	f
3210	CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	274 605	a-b
3210	CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	274 605	a-b
3211	PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	274	b
3211	PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	274	b
3212	HYPOCHLORITES, INORGANIC, N.O.S.	5.1	II	5.1	●	274 559	a-b
3213	BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	274 604	a-b
3213	BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	274 604	a-b
3214	PERMANGANATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	274 608	a-b
3215	PERSULPHATES, INORGANIC, N.O.S.	5.1	III	5.1	●	274	b
3216	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	274	b
3218	NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	270 274 511	a-b
3218	NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	270 274 511	a-b
3219	NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	II	5.1	●	103 274	a-b
3219	NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1	III	5.1	●	103 274	a-b

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	II	3 +6.1	●	220 221 274 601	c-e
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3	III	3 +6.1	●	220 221 274 601	c-e
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1	II	6.1	●	221 274 601	c-e
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1	III	6.1	●	221 274 601	c-e
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point	3	III	3	●	274 560	a-i
3257	ELEVATED TEMPERATURE LIQUID, N.O.S., at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	III	9	●	274 580 643	i
3258	ELEVATED TEMPERATURE SOLID, N.O.S., at or above 240 °C	9	III	9	●	274 580 643	i
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1	I	6.1	●	274 563	a-b
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1	II	6.1	●	274 563	a-b-c
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1	III	6.1	●	274 563	a-b-c
3284	TELLURIUM COMPOUND, N.O.S.	6.1	I	6.1	●	274	b-c
3284	TELLURIUM COMPOUND, N.O.S.	6.1	II	6.1	●	274	b-c
3284	TELLURIUM COMPOUND, N.O.S.	6.1	III	6.1	●	274	b-c
3285	VANADIUM COMPOUND, N.O.S.	6.1	I	6.1	●	274 564	a-b-c
3285	VANADIUM COMPOUND, N.O.S.	6.1	II	6.1	●	274 564	a-b-c
3285	VANADIUM COMPOUND, N.O.S.	6.1	III	6.1	●	274 564	a-b-c
3361	CHLOROSILANES, TOXIC, CORROSIVE, N.O.S.	6.1	II	6.1 +8	●	274	b-c
3362	CHLOROSILANES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	II	6.1 +3 +8	●	274	b-c
3401	ALKALI METAL AMALGAM, SOLID	4.3	I	4.3	●	182 274	c

UN	Name and description	Class	PG	Labels	IMDG (Marine Pollutant)	SP	Comment
3402	ALKALINE EARTH METAL AMALGAM, SOLID	4.3	I	4.3	●	183 274 506	a-c
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1	I	6.1	●	274 563	a-b-c
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1	II	6.1	●	274 563	a-b-c
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1	III	6.1	●	274 563	a-b-c
