

Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
Isopropyl ether, see	1159	3		LEAD COMPOUND, SOLUBLE, N.O.S.	2291	6.1	
Isopropylethylene, see	2561	3		LEAD CYANIDE	1620	6.1	
Isopropyl formate, see	1281	3		Lead (II) cyanide	1620	6.1	
ISOPROPYL ISOBUTYRATE	2406	3		LEAD DIOXIDE	1872	5.1	
ISOPROPYL ISOCYANATE	2483	6.1		LEAD NITRATE	1469	5.1	
Isopropyl mercaptan, see	2402	3		Lead (II) nitrate	1469	5.1	
ISOPROPYL NITRATE	1222	3		LEAD PERCHLORATE, SOLID	1470	5.1	
ISOPROPYL PROPIONATE	2409	3		LEAD PERCHLORATE, SOLUTION	3408	5.1	
Isopropyltoluene, see	2046	3		Lead (II) perchlorate	1470	5.1	
Isopropyltoluol, see	2046	3			3408	5.1	
ISOSORBIDE DINITRATE	2907	4.1		Lead peroxide, see	1872	5.1	
MIXTURE with not less than 60 % lactose, mannose, starch or calcium hydrogen phosphate				LEAD PHOSPHITE, DIBASIC	2989	4.1	
ISOSORBIDE-5-MONONITRATE	3251	4.1		LEAD STYPHNATE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	0130	1	
Isovaleraldehyde, see	2058	3					
JET PERFORATING GUNS, CHARGED, oil well, without detonator	0124	1		LEAD SULPHATE with more than 3 % free acid	1794	8	
	0494	1		Lead tetraethyl, see	1649	6.1	
Jet tappers, without detonator, see	0059	1		Lead tetramethyl, see	1649	6.1	
KEROSENE	1223	3		LEAD TRINITRORESORCINATE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass, see	0130	1	
KETONES, LIQUID, N.O.S.	1224	3					
KRILL MEAL	3497	4.2		LIFE-SAVING APPLIANCES NOT SELF-INFLATING containing dangerous goods as equipment	3072	9	
KRYPTON, COMPRESSED	1056	2		LIFE-SAVING APPLIANCES, SELF-INFLATING	2990	9	
KRYPTON, REFRIGERATED LIQUID	1970	2		LIGHTER REFILLS containing flammable gas	1057	2	
Lacquer, see	1263	3		LIGHTERS containing flammable gas	1057	2	
	3066	8		LIGHTERS, FUSE	0131	1	
	3469	3		Limonene, inactive, see	2052	3	
	3470	8		LIQUEFIED GAS, N.O.S.	3163	2	
Lacquer base, liquid, see	1263	3		LIQUEFIED GAS, FLAMMABLE, N.O.S.	3161	2	
	3066	8					
	3469	3		LIQUEFIED GASES, non-flammable, charged with nitrogen, carbon dioxide or air	1058	2	
	3470	8		LIQUEFIED GAS, OXIDIZING, N.O.S.	3157	2	
Lacquer base or lacquer chips, nitrocellulose, dry, see	2557	4.1		LIQUEFIED GAS, TOXIC, N.O.S.	3162	2	
Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see	1263	3		LIQUEFIED GAS, TOXIC, CORROSIVE, N.O.S.	3308	2	
	2059	3					
	2555	4.1					
	2556	4.1					
LEAD ACETATE	1616	6.1					
Lead (II) acetate, see	1616	6.1					
LEAD ARSENATES	1617	6.1					
LEAD ARSENITES	1618	6.1					
LEAD AZIDE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	0129	1					
Lead chloride, solid, see	2291	6.1					

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LIQUEFIED GAS, TOXIC, FLAMMABLE, N.O.S.	3160	2		LITHIUM METAL BATTERIES (including lithium alloy batteries)	3090	9	
LIQUEFIED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	3309	2		LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT (including lithium alloy batteries)	3091	9	
LIQUEFIED GAS, TOXIC, OXIDIZING, N.O.S.	3307	2		LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT (including lithium alloy batteries)	3091	9	
LIQUEFIED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	3310	2		LITHIUM NITRATE	2722	5.1	
Liquefied petroleum gas, see	1075	2		LITHIUM NITRIDE	2806	4.3	
Liquid filler, see	1263	3		LITHIUM PEROXIDE	1472	5.1	
	3066	8		Lithium silicide, see	1417	4.3	
	3469	3		LITHIUM SILICON	1417	4.3	
	3470	8		L.n.g., see	1972	2	
Liquid lacquer base, see	1263	3		LONDON PURPLE	1621	6.1	
	3066	8		L.p.g., see	1075	2	
	3469	3		Lye, see	1823	8	
	3470	8		Lythene, see	1268	3	
LITHIUM	1415	4.3		MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED	3529	2	
Lithium alkyls, liquid, see	3394	4.2		MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED	3528	3	
Lithium alkyls, solid, see	3393	4.2		MACHINERY, INTERNAL COMBUSTION,	3530	9	
LITHIUM ALUMINIUM HYDRIDE	1410	4.3		MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED	3529	2	
LITHIUM ALUMINIUM HYDRIDE, ETHEREAL	1411	4.3		MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED	3528	3	
LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries	3536	9		MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED	3528	3	
LITHIUM BOROHYDRIDE	1413	4.3		MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED	3528	3	
LITHIUM FERROSILICON	2830	4.3		MAGNESIUM in pellets, turnings or ribbons	1869	4.1	
LITHIUM HYDRIDE	1414	4.3		Magnesium alkyls, see	3394	4.2	
LITHIUM HYDRIDE, FUSED SOLID	2805	4.3		MAGNESIUM ALLOYS with more than 50 % magnesium in pellets, turnings or ribbons	1869	4.1	
LITHIUM HYDROXIDE	2680	8		MAGNESIUM ALLOYS POWDER	1418	4.3	
LITHIUM HYDROXIDE SOLUTION	2679	8		MAGNESIUM ALUMINIUM PHOSPHIDE	1419	4.3	
LITHIUM HYPOCHLORITE, DRY	1471	5.1		MAGNESIUM ARSENATE	1622	6.1	
LITHIUM HYPOCHLORITE MIXTURE	1471	5.1		Magnesium bisulphite solution, see	2693	8	
Lithium in cartouches, see	1415	4.3		MAGNESIUM BROMATE	1473	5.1	
LITHIUM ION BATTERIES (including lithium ion polymer batteries)	3480	9		MAGNESIUM CHLORATE	2723	5.1	
LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT (including lithium ion polymer batteries)	3481	9		Magnesium chloride and chlorate mixture, see	1459	5.1	
LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)	3481	9		3407	5.1		
				MAGNESIUM DIAMIDE	2004	4.2	
				Magnesium diphenyl, see	3393	4.2	

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MAGNESIUM FLUORO-SILICATE	2853	6.1		MEDICAL WASTE, CATEGORY A, AFFECTING HUMANS, solid	3549	6.2	
MAGNESIUM GRANULES, COATED, particle size not less than 149 microns	2950	4.3		MEDICAL WASTE, CATEGORY A, AFFECTING ANIMALS only, solid	3549	6.2	
MAGNESIUM HYDRIDE	2010	4.3		MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	3248	3	
MAGNESIUM NITRATE	1474	5.1		MEDICINE, LIQUID, TOXIC, N.O.S.	1851	6.1	
MAGNESIUM PERCHLORATE	1475	5.1		MEDICINE, SOLID, TOXIC, N.O.S.	3249	6.1	
MAGNESIUM PEROXIDE	1476	5.1		p-Mentha-1,8-diene, see	2052	8	
MAGNESIUM PHOSPHIDE	2011	4.3		MERCAPTANS, LIQUID, FLAMMABLE, N.O.S.	3336	3	
MAGNESIUM POWDER	1418	4.3		MERCAPTANS, LIQUID, FLAMMABLE, TOXIC, N.O.S.	1228	3	
Magnesium scrap, see	1869	4.1		MERCAPTANS, LIQUID, TOXIC, FLAMMABLE, N.O.S.	3071	6.1	
MAGNESIUM SILICIDE	2624	4.3		MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.	3336	3	
Magnesium silicofluoride, see	2853	6.1		MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, TOXIC, N.O.S.	1228	3	
Magnetized material	2807	9	Not subject to ADR	MERCAPTAN MIXTURE, LIQUID, TOXIC, FLAMMABLE, N.O.S.	3071	6.1	
MALEIC ANHYDRIDE	2215	8		2-Mercaptoethanol, see	2966	6.1	
MALEIC ANHYDRIDE, MOLTEN	2215	8		2-Mercaptopropionic acid, see	2936	6.1	
Malonic dinitrile, see	2647	6.1		5-MERCAPTOTETRAZOL-1-ACETIC ACID	0448	1	
Malonodinitrile, see	2647	6.1		MERCURIC ARSENATE	1623	6.1	
MALONONITRILE	2647	6.1		MERCURIC CHLORIDE	1624	6.1	
MANEB	2210	4.2		MERCURIC NITRATE	1625	6.1	
MANEB PREPARATION with not less than 60 % maneb	2210	4.2		MERCURIC POTASSIUM CYANIDE	1626	6.1	
MANEB PREPARATION, STABILIZED against self-heating	2968	4.3		Mercuric sulphate, see	1645	6.1	
MANEB, STABILIZED against self-heating	2968	4.3		Mercuriol, see	1639	6.1	
Manganese ethylene-dithiocarbamate, see	2210	4.2		Mercurous bisulphate, see	1645	6.1	
Manganese ethylene-1,2-dithiocarbamate, see	2210	4.2		Mercurous chloride, see	2025	6.1	
MANGANESE NITRATE	2724	5.1		MERCUROS NITRATE	1627	6.1	
Manganese (II) nitrate, see	2724	5.1		Mercurous sulphate, see	1645	6.1	
MANGANESE RESINATE	1330	4.1		MERCURY	2809	8	
Manganous nitrate, see	2724	5.1		MERCURY ACETATE	1629	6.1	
MANNITOL HEXANITRATE, WETTED with not less than 40 % water, or mixture of alcohol and water, by mass	0133	1		MERCURY AMMONIUM CHLORIDE	1630	6.1	
MATCHES, FUSEE	2254	4.1		MERCURY BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2778	3	
MATCHES, SAFETY (book, card or strike on box)	1944	4.1		MERCURY BASED PESTICIDE, LIQUID, TOXIC	3012	6.1	
MATCHES, "STRIKE ANYWHERE"	1331	4.1					
MATCHES, WAX "VESTA"	1945	4.1					
MEDICAL WASTE, N.O.S.	3291	6.2					



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MERCURY BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3011	6.1		METAL HYDRIDES, FLAMMABLE, N.O.S.	3182	4.1	
MERCURY BASED PESTICIDE, SOLID, TOXIC	2777	6.1		METAL HYDRIDES, WATER-REACTIVE, N.O.S.	1409	4.3	
MERCURY BENZOATE	1631	6.1		METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.	3208	4.3	
Mercury bichloride, see	1624	6.1		METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S.	3209	4.3	
MERCURY BROMIDES	1634	6.1		METAL POWDER, FLAMMABLE, N.O.S.	3089	4.1	
MERCURY COMPOUND, LIQUID, N.O.S.	2024	6.1		METAL POWDER, SELF-HEATING, N.O.S.	3189	4.2	
MERCURY COMPOUND, SOLID, N.O.S.	2025	6.1		METAL SALTS OF ORGANIC COMPOUNDS, FLAMMABLE, N.O.S.	3181	4.1	
MERCURY CONTAINED IN MANUFACTURED ARTICLES	3506	8		METHACRYLALDEHYDE, STABILIZED	2396	3	
MERCURY CYANIDE	1636	6.1		METHACRYLIC ACID, STABILIZED	2531	8	
MERCURY FULMINATE, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	0135	1		METHACRYLONITRILE, STABILIZED	3079	6.1	
MERCURY GLUCONATE	1637	6.1		METHALLYL ALCOHOL	2614	3	
MERCURY IODIDE	1638	6.1		Methanal, see	1198 2209	3 8	
MERCURY NUCLEATE	1639	6.1		Methane and hydrogen mixture, see	2034	2	
MERCURY OLEATE	1640	6.1		METHANE, COMPRESSED	1971	2	
MERCURY OXIDE	1641	6.1		METHANE, REFRIGERATED LIQUID	1972	2	
MERCURY OXYCYANIDE, DESENSITIZED	1642	6.1		METHANESULPHONYL CHLORIDE	3246	6.1	
MERCURY POTASSIUM IODIDE	1643	6.1		METHANOL	1230	3	
MERCURY SALICYLATE	1644	6.1		2-Methoxyethyl acetate, see	1189	3	
MERCURY SULPHATE	1645	6.1		METHOXYMETHYL ISOCYANATE	2605	6.1	
MERCURY THIOCYANATE	1646	6.1		4-METHOXY-4-METHYLPENTAN-2-ONE	2293	3	
Mesitylene, see	2325	3		1-Methoxy-2-nitrobenzene, see	2730 3458	6.1 6.1	
MESITYL OXIDE	1229	3		1-Methoxy-3-nitrobenzene, see	2730 3458	6.1 6.1	
Metal alkyl halides, water-reactive, n.o.s. / Metal aryl halides, water-reactive, n.o.s., see	3394	4.2		1-Methoxy-4-nitrobenzene, see	2730 3458	6.1 6.1	
Metal alkyl hydrides, water-reactive, n.o.s. / Metal aryl hydrides, water-reactive, n.o.s., see	3394	4.2		1-METHOXY-2-PROPANOL	3092	3	
Metal alkyls, water-reactive, n.o.s. / Metal aryls, water-reactive, n.o.s., see	3393	4.2		METHYL ACETATE	1231	3	
METAL CARBONYLS, LIQUID, N.O.S.	3281	6.1		METHYLACETYLENE AND PROPADIENE MIXTURE, STABILIZED such as mixture P1 or mixture P2	1060	2	
METAL CARBONYLS, SOLID, N.O.S.	3466	6.1		beta-Methyl acrolein, see	1143	6.1	
METAL CATALYST, DRY	2881	4.2					
METAL CATALYST, WETTED with a visible excess of liquid	1378	4.2					
METALDEHYDE	1332	4.1					



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METHYL ACRYLATE, STABILIZED	1919	3		METHYL CHLOROMETHYL ETHER	1239	6.1	
METHYLAL	1234	3		METHYL 2-CHLORO-PROPIONATE	2933	3	
Methyl alcohol, see	1230	3		Methyl alpha-chloropropionate, see	2933	3	
Methyl allyl alcohol, see	2614	3		METHYLCHLOROSILANE	2534	2	
METHYLALLYL CHLORIDE	2554	3		Methyl cyanide, see	1648	3	
METHYLAMINE, ANHYDROUS	1061	2		METHYLCYCLOHEXANE	2296	3	
METHYLAMINE, AQUEOUS SOLUTION	1235	3		METHYLCYCLOHEXANOLS, flammable	2617	3	
METHYLAMYL ACETATE	1233	3		METHYLCYCLOHEXANONE	2297	3	
Methyl amyl alcohol, see	2053	3		METHYLCYCLOPENTANE	2298	3	
Methyl amyl ketone, see	1110	3		METHYL DICHLOROACETATE	2299	6.1	
N-METHYLANILINE	2294	6.1		METHYLDICHLOROSILANE	1242	4.3	
Methylated spirit, see	1986 1987	3 3		Methylene bromide, see	2664	6.1	
alpha-METHYLBENZYL ALCOHOL, LIQUID	2937	6.1		Methylene chloride, see	1593	6.1	
alpha-METHYLBENZYL ALCOHOL, SOLID	3438	6.1		Methylene chloride and methyl chloride mixture, see	1912	2	
METHYL BROMIDE with not more than 2 % chloropicrin	1062	2		Methylene cyanide, see	2647	6.1	
Methyl bromide and chloropicrin mixture, with more than 2 % chloropicrin, see	1581	2		p,p'-Methylene dianiline, see	2651	6.1	
METHYL BROMIDE AND ETHYLENE DIBROMIDE MIXTURE, LIQUID	1647	6.1		Methylene dibromide, see	2664	6.1	
METHYL BROMOACETATE	2643	6.1		2,2'-Methylene-di-(3,4,6-trichlorophenol), see	2875	6.1	
2-METHYLBUTANAL	3371	3		Methyl ethyl ether, see	1039	2	
3-METHYLBUTAN-2-ONE	2397	3		METHYL ETHYL KETONE, see	1193	3	
2-METHYL-1-BUTENE	2459	3		2-METHYL-5-ETHYLPYRIDINE	2300	6.1	
2-METHYL-2-BUTENE	2460	3		METHYL FLUORIDE	2454	2	
3-METHYL-1-BUTENE	2561	3		METHYL FORMATE	1243	3	
N-METHYLBUTYLAMINE	2945	3		2-METHYLFURAN	2301	3	
METHYL tert-BUTYL ETHER	2398	3		Methyl glycol, see	1188	3	
METHYL BUTYRATE	1237	3		Methyl glycol acetate, see	1189	3	
METHYL CHLORIDE	1063	2		2-METHYL-2-HEPTANETHIOL	3023	6.1	
Methyl chloride and chloropicrin mixture, see	1582	2		5-METHYLHEXAN-2-ONE	2302	3	
METHYL CHLORIDE AND METHYLENE CHLORIDE MIXTURE	1912	2		METHYLHYDRAZINE	1244	6.1	
METHYL CHLOROACETATE	2295	6.1		METHYL IODIDE	2644	6.1	
Methyl chlorocarbonate, see	1238	6.1		METHYL ISOBUTYL CARBINOL	2053	3	
Methyl chloroform, see	2831	6.1		METHYL ISOBUTYL KETONE	1245	3	
METHYL CHLOROFORMATE	1238	6.1		METHYL ISOCYANATE	2480	6.1	
				METHYL ISOPROPENYL KETONE, STABILIZED	1246	3	
				METHYL ISOTHIOCYANATE	2477	6.1	
				METHYL ISOVALERATE	2400	3	
				METHYL MAGNESIUM BROMIDE IN ETHYL ETHER	1928	4.3	
				METHYL MERCAPTAN	1064	2	

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Methyl mercapto-propionaldehyde, see	2785	6.1		Missiles, guided, see	0180	1	
METHYL METHACRYLATE MONOMER, STABILIZED	1247	3			0181	1	
4-METHYLMORPHOLINE	2535	3			0182	1	
N-METHYLMORPHOLINE, see	2535	3			0183	1	
METHYL NITRITE	2455	2	Carriage prohibited		0295	1	
					0397	1	
METHYL ORTHOSILICATE	2606	6.1			0398	1	
METHYLPENTADIENE	2461	3		Mixtures A, A01, A02, A0, A1, B1, B2, B or C, see	0436	1	
Methylpentanes, see	1208	3			0437	1	
2-METHYLPENTAN-2-OL	2560	3			0438	1	
4-Methylpentan-2-ol, see	2053	3		Mixture F1, mixture F2 or mixture F3, see	1965	2	
3-Methyl-2-penten-4ynol, see	2705	8			1078	2	
METHYLPHENYL-DICHLOROSILANE	2437	8		MIXTURES OF 1,3-BUTADIENE AND HYDROCARBONS, STABILIZED, containing more than 40% butadienes	1010	2	
2-Methyl-2-phenylpropane, see	2709	3		Mixture P1 or mixture P2, see	1060	2	
1-METHYLPYRIDINE	2399	3		MOLYBDENUM PENTACHLORIDE	2508	8	
METHYL PROPIONATE	1248	3		Monochloroacetic acid, see	1750	6.1	
Methylpropylbenzene, see	2046	3			1751	6.1	
METHYL PROPYL ETHER	2612	3		Monochlorobenzene, see	1134	3	
METHYL PROPYL KETONE	1249	3		Monochlorodifluoromethane, see	1018	2	
Methyl pyridines, see	2313	3		Monochlorodifluoromethane and monochloropentafluoroethane mixture, see	1973	2	
Methylstyrene, inhibited, see	2618	3		Monochlorodifluoromonobromomethane, see	1974	2	
alpha-Methylstyrene, see	2303	3		Monochloropentafluoroethane and monochlorodifluoromethane mixture, see	1973	2	
Methyl sulphate, see	1595	6.1		Monoethylamine, see	1036	2	
Methyl sulphide, see	1164	3		MONONITROTOLUIDINES, see	2660	6.1	
METHYLTETRAHYDROFURAN	2536	3		Monopropylamine, see	1277	3	
METHYL TRICHLOROACETATE	2533	6.1		MORPHOLINE	2054	8	
METHYLTRICHLOROSILANE	1250	3		MOTOR FUEL ANTI-KNOCK MIXTURE	1649	6.1	
alpha-METHYLVALERAL-DEHYDE	2367	3		MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	3483	6.1	
Methyl vinyl benzene, inhibited, see	2618	3		MOTOR SPIRIT	1203	3	
METHYL VINYL KETONE, STABILIZED	1251	6.1		Motor spirit and ethanol mixture, with more than 10 % ethanol, see	3475	3	
M.i.b.c., see	2053	3		Muriatic acid, see	1789	8	
MINES with bursting charge	0136	1		MUSK XYLENE, see	2956	4.1	
	0137	1		Mysorite, see	2212	9	
	0138	1		Naphta, see	1268	3	
	0294	1		Naphta, petroleum, see	1268	3	
Mirbane oil, see	1662	6.1		Naphta, solvent, see	1268	3	
				NAPHTHALENE, CRUDE	1334	4.1	

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NAPHTHALENE, MOLTEN	2304	4.1		NICOTINE SULPHATE, SOLUTION	1658	6.1	
NAPHTHALENE, REFINED	1334	4.1		NICOTINE TARTRATE	1659	6.1	
alpha-NAPHTHYLAMINE	2077	6.1		NITRATES, INORGANIC, N.O.S.	1477	5.1	
beta-NAPHTHYLAMINE, SOLID	1650	6.1		NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	3218	5.1	
beta-NAPHTHYLAMINE, SOLUTION	3411	6.1		NITRATING ACID MIXTURE with more than 50 % nitric acid	1796	8	
NAPHTHYLTHIOUREA	1651	6.1		NITRATING ACID MIXTURE with not more than 50 % nitric acid	1796	8	
1-Naphthylthiourea, see	1651	6.1		NITRATING ACID MIXTURE, SPENT, with more than 50 % nitric acid	1826	8	
NAPHTHYLUREA	1652	6.1		NITRATING ACID MIXTURE, SPENT, with not more than 50 % nitric acid	1826	8	
NATURAL GAS, COMPRESSED with high methane content	1971	2		NITRIC ACID, other than red fuming, with at least 65 % but not more than 70 % nitric acid	2031	8	
NATURAL GAS, REFRIGERATED LIQUID with high methane content	1972	2		NITRIC ACID, other than red fuming, with less than 65 % nitric acid	2031	8	
Natural gasoline, see	1203	3		NITRIC ACID, other than red fuming, with more than 70 % nitric acid	2031	8	
Neohexane, see	1208	3		NITRIC ACID, RED FUMING	2032	8	
NEON, COMPRESSED	1065	2		NITRIC OXIDE, COMPRESSED	1660	2	
NEON, REFRIGERATED LIQUID	1913	2		NITRIC OXIDE AND DINITROGEN TETROXIDE MIXTURE	1975	2	
Neothyl, see	2612	3		NITRIC OXIDE AND NITROGEN DIOXIDE MIXTURE, see	1975	2	
NICKEL CARBONYL	1259	6.1		NITRILES, FLAMMABLE, TOXIC, N.O.S.	3273	3	
NICKEL CYANIDE	1653	6.1		NITRILES, LIQUID, TOXIC, N.O.S.	3276	6.1	
Nickel (II) cyanide, see	1653	6.1		NITRILES, SOLID, TOXIC, N.O.S.	3439	6.1	
NICKEL NITRATE	2725	5.1		NITRILES, TOXIC, FLAMMABLE, N.O.S.	3275	6.1	
Nickel (II) nitrate, see	2725	5.1		NITRITES, INORGANIC, N.O.S.	2627	5.1	
NICKEL NITRITE	2726	5.1		NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	3219	5.1	
Nickel (II) nitrite, see	2726	5.1		NITROANILINES (o-, m-, p-)	1661	6.1	
Nickelous nitrate, see	2725	5.1		NITROANISOLE, LIQUID	2730	6.1	
Nickelous nitrite, see	2726	5.1		NITROANISOLE, SOLID	3458	6.1	
Nickel tetracarbonyl, see	1259	6.1		NITROBENZENE	1662	6.1	
NICOTINE	1654	6.1		Nitrobenzene bromide, see	2732	6.1	
NICOTINE COMPOUND, LIQUID, N.O.S.	3144	6.1		NITROBENZENESULPHONIC ACID	2305	8	
NICOTINE COMPOUND, SOLID, N.O.S.	1655	6.1		Nitrobenzol, see	1662	6.1	
NICOTINE HYDROCHLORIDE, LIQUID	1656	6.1					
NICOTINE HYDROCHLORIDE, SOLID	3444	6.1					
NICOTINE HYDROCHLORIDE, SOLUTION	1656	6.1					
NICOTINE PREPARATION, LIQUID, N.O.S.	3144	6.1					
NICOTINE PREPARATION, SOLID, N.O.S.	1655	6.1					
NICOTINE SALICYLATE	1657	6.1					
NICOTINE SULPHATE, SOLID	3445	6.1					



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5-NITROBENZOTRIAZOL	0385	1		3-NITRO-4-CHLOROBENZO-TRIFLUORIDE	2307	6.1	
NITROBENZOTRIFLUORIDES, LIQUID	2306	6.1		NITROCRESOLS, LIQUID	3434	6.1	
NITROBENZOTRIFLUORIDES, SOLID	3431	6.1		NITROCRESOLS, SOLID	2446	6.1	
NITROBROMOBENZENES, LIQUID	2732	6.1		NITROETHANE	2842	3	
NITROBROMOBENZENES, SOLID	3459	6.1		NITROGEN, COMPRESSED	1066	2	
NITROCELLULOSE, dry or wetted with less than 25 % water (or alcohol), by mass	0340	1		NITROGEN DIOXIDE, see	1067	2	
NITROCELLULOSE, unmodified or plasticized with less than 18 % plasticizing substance, by mass	0341	1		NITROGEN, REFRIGERATED LIQUID	1977	2	
NITROCELLULOSE MEMBRANE FILTERS, with not more than 12.6 % nitrogen, by dry mass	3270	4.1		NITROGEN TRIFLUORIDE	2451	2	
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITH PLASTICIZER, WITH PIGMENT	2557	4.1		NITROGEN TRIOXIDE	2421	2	Carriage prohibited
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITH PLASTICIZER, WITHOUT PIGMENT	2557	4.1		NITROGLYCERIN, DESENSITIZED with not less than 40 % non-volatile water-insoluble phlegmatizer, by mass	0143	1	
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITHOUT PLASTICIZER, WITH PIGMENT	2557	4.1		NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, N.O.S. with not more than 30 % nitroglycerin, by mass	3357	3	
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITHOUT PLASTICIZER, WITH PIGMENT	2557	4.1		NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, FLAMMABLE, N.O.S. with not more than 30 % nitroglycerin, by mass	3343	3	
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITHOUT PLASTICIZER, WITH PIGMENT	2557	4.1		NITROGLYCERIN MIXTURE, DESENSITIZED, SOLID, N.O.S. with more than 2 % but not more than 10 % nitroglycerin, by mass	3319	4.1	
NITROCELLULOSE, with not more than 12.6 % nitrogen, by dry mass, MIXTURE WITHOUT PLASTICIZER, WITHOUT PIGMENT	2557	4.1		NITROGLYCERIN, SOLUTION IN ALCOHOL with more than 1 % but not more than 5 % nitroglycerin	3064	3	
NITROCELLULOSE, PLASTICIZED with not less than 18 % plasticizing substance, by mass	0343	1		NITROGLYCERIN SOLUTION IN ALCOHOL with more than 1 % but not more than 10 % nitroglycerin	0144	1	
NITROCELLULOSE SOLUTION, FLAMMABLE with not more than 12.6 % nitrogen, by dry mass, and not more than 55 % nitrocellulose	2059	3		NITROGLYCERIN SOLUTION IN ALCOHOL with not more than 1 % nitroglycerin	1204	3	
NITROCELLULOSE, WETTED with not less than 25 % alcohol, by mass	0342	1		NITROGUANIDINE, dry or wetted with less than 20 % water, by mass	0282	1	
NITROCELLULOSE WITH ALCOHOL (not less than 25 % alcohol, by mass, and not more than 12.6 % nitrogen, by dry mass)	2556	4.1		NITROGUANIDINE, WETTED with not less than 20 % water, by mass	1336	4.1	
NITROCELLULOSE WITH WATER (not less than 25 % water, by mass)	2555	4.1		NITROHYDROCHLORIC ACID	1798	8	Carriage prohibited
Nitrochlorobenzenes, see	1578 3409	6.1		NITROMANNITE, WETTED, see	0133	1	
				NITROMETHANE	1261	3	
				Nitromuriatic acid, see	1798	8	
				NITRONAPHTHALENE	2538	4.1	
				NITROPHENOLS (o-, m-, p-)	1663	6.1	

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4-NITROPHENYL-HYDRAZINE, with not less than 30 % water, by mass	3376	4.1		OCTYL ALDEHYDES	1191	3	
NITROPROPANES	2608	3		tert-Octyl mercaptan, see	3023	6.1	
p-NITROSODIMETHYLANILINE	1369	4.2		OCTYLTRICHLOROSILANE	1801	8	
NITROSTARCH, dry or wetted with less than 20 % water, by mass	0146	1		Oenanthal, see	3056	3	
NITROSTARCH, WETTED with not less than 20 % water, by mass	1337	4.1		OIL GAS, COMPRESSED	1071	2	
NITROSYL CHLORIDE	1069	2		Oleum, see	1831	8	
NITROSYLSULPHURIC ACID, LIQUID	2308	8		ORGANIC PEROXIDE TYPE B, LIQUID	3101	5.2	
NITROSYLSULPHURIC ACID, SOLID	3456	8		ORGANIC PEROXIDE TYPE B, LIQUID, TEMPERATURE CONTROLLED	3111	5.2	
NITROTOLUENES, LIQUID	1664	6.1		ORGANIC PEROXIDE TYPE B, SOLID	3102	5.2	
NITROTOLUENES, SOLID	3446	6.1		ORGANIC PEROXIDE TYPE B, SOLID, TEMPERATURE CONTROLLED	3112	5.2	
NITROTOLUIDINES	2660	6.1		ORGANIC PEROXIDE TYPE C, LIQUID	3103	5.2	
NITROTRIAZOLONE	0490	1		ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED	3113	5.2	
NITRO UREA	0147	1		ORGANIC PEROXIDE TYPE C, SOLID	3104	5.2	
NITROUS OXIDE	1070	2		ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED	3114	5.2	
NITROUS OXIDE, REFRIGERATED LIQUID	2201	2		ORGANIC PEROXIDE TYPE D, LIQUID	3105	5.2	
NITROXYLENES, LIQUID	1665	6.1		ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED	3115	5.2	
NITROXYLENES, SOLID	3447	6.1		ORGANIC PEROXIDE TYPE D, SOLID	3106	5.2	
Non-activated carbon, see	1361	4.2		ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED	3116	5.2	
Non-activated charcoal, see	1361	4.2		ORGANIC PEROXIDE TYPE E, LIQUID	3107	5.2	
NONANES	1920	3		ORGANIC PEROXIDE TYPE E, LIQUID, TEMPERATURE CONTROLLED	3117	5.2	
NONYLTRICHLOROSILANE	1799	8		ORGANIC PEROXIDE TYPE E, SOLID	3108	5.2	
2,5-NORBORNADIENE, STABILIZED, see	2251	3		ORGANIC PEROXIDE TYPE E, SOLID, TEMPERATURE CONTROLLED	3118	5.2	
Normal propyl alcohol, see	1274	3		ORGANIC PEROXIDE TYPE F, LIQUID	3109	5.2	
NTO, see	0490	1		ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED	3119	5.2	
OCTADECYLTRICHLORO-SILANE	1800	8					
OCTADIENE	2309	3					
OCTAFLUOROBUT-2-ENE	2422	2					
OCTAFLUOROCYCLOBUTANE	1976	2					
OCTAFLUOROPROPANE	2424	2					
OCTANES	1262	3					
OCTOGEN, see	0226	1					
	0391	1					
	0484	1					
OCTOL, dry or wetted with less than 15 % water, by mass, see	0266	1					
OCTOLITE, dry or wetted with less than 15 % water, by mass	0266	1					
OCTONAL	0496	1					

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ORGANIC PEROXIDE TYPE F, SOLID	3110	5.2		ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE	3398	4.3	
ORGANIC PEROXIDE TYPE F, SOLID, TEMPERATURE CONTROLLED	3120	5.2		ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE	3395	4.3	
Organic peroxides, see 2.2.52.4 for an alphabetic list of currently assigned organic peroxides and see	3101 to 3120	5.2		ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	3399	4.3	
ORGANIC PIGMENTS, SELF-HEATING	3313	4.2		ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE	3396	4.3	
ORGANOARSENIC COMPOUND, LIQUID, N.O.S.	3280	6.1		ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING	3397	4.3	
ORGANOARSENIC COMPOUND, SOLID, N.O.S.	3465	6.1		ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.	3278	6.1	
ORGANOCHLORINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2762	3		ORGANOPHOSPHORUS COMPOUND, SOLID, TOXIC, N.O.S.	3464	6.1	
ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC	2996	6.1		ORGANOPHOSPHORUS COMPOUND, TOXIC, FLAMMABLE, N.O.S.	3279	6.1	
ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	2995	6.1		ORGANOPHOSPHORUS PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2784	3	
ORGANOCHLORINE PESTICIDE, SOLID, TOXIC	2761	6.1		ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	3018	6.1	
ORGANOMETALLIC COMPOUND, LIQUID, TOXIC, N.O.S.	3282	6.1		ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3017	6.1	
ORGANOMETALLIC COMPOUND, SOLID, TOXIC, N.O.S.	3467	6.1		ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC	2783	6.1	
Organometallic compound, solid, water-reactive, flammable, n.o.s., see	3396	4.3		ORGANOTIN COMPOUND, LIQUID, N.O.S.	2788	6.1	
Organometallic compound or Organometallic compound solution or Organometallic compound dispersion, water-reactive, flammable, n.o.s., see	3399	4.3		ORGANOTIN COMPOUND, SOLID, N.O.S.	3146	6.1	
ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC	3392	4.2		ORGANOTIN PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2787	3	
ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC	3391	4.2		ORGANOTIN PESTICIDE, LIQUID, TOXIC	3020	6.1	
ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING	3400	4.2		ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3019	6.1	
ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER-REACTIVE	3394	4.2		ORGANOTIN PESTICIDE, SOLID, TOXIC	2786	6.1	
ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE	3393	4.2		Orthophosphoric acid, see	1805	8	
				OSMIUM TETROXIDE	2471	6.1	
				OXIDIZING LIQUID, N.O.S.	3139	5.1	



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OXIDIZING LIQUID, CORROSIVE, N.O.S.	3098	5.1		PENTAERYTHRITE TETRANITRATE with not less than 7 % wax, by mass	0411	1	
OXIDIZING LIQUID, TOXIC, N.O.S.	3099	5.1		PENTAERYTHRITE TETRANITRATE, DESENSITIZED with not less than 15 % phlegmatizer, by mass	0150	1	
OXIDIZING SOLID, N.O.S.	1479	5.1		PENTAERYTHRITE TETRANITRATE MIXTURE, DESENSITIZED, SOLID, N.O.S. with more than 10 % but not more than 20 % PETN, by mass	3344	4.1	
OXIDIZING SOLID, CORROSIVE, N.O.S.	3085	5.1		PENTAERYTHRITE TETRANITRATE, WETTED with not less than 25 % water, by mass	0150	1	
OXIDIZING SOLID, FLAMMABLE, N.O.S.	3137	5.1	Carriage prohibited	PENTAERYTHRITOL TETRANITRATE, see	0150 0411 3344	1 1 4.1	
OXIDIZING SOLID, SELF-HEATING, N.O.S.	3100	5.1	Carriage prohibited	PENTAFLUOROETHANE	3220	2	
OXIDIZING SOLID, TOXIC, N.O.S.	3087	5.1		Pentafluoroethane, 1,1,1-trifluoroethane, and 1,1,1,2-tetrafluoroethane zeotropic mixture with approximately 44 % pentafluoroethane and 52 % 1,1,1-trifluoroethane, see	3337	2	
OXIDIZING SOLID, WATER-REACTIVE, N.O.S.	3121	5.1	Carriage prohibited	PENTAMETHYLHEPTANE	2286	3	
Oxirane, see	1040	2		Pentanal, see	2058	3	
OXYGEN, COMPRESSED	1072	2		PENTANE-2,4-DIONE	2310	3	
OXYGEN DIFLUORIDE, COMPRESSED	2190	2		PENTANES, liquid	1265	3	
OXYGEN GENERATOR, CHEMICAL	3356	5.1		n-Pentane, see	1265	3	
OXYGEN, REFRIGERATED LIQUID	1073	2		PENTANOLS	1105	3	
1-Oxy-4-nitrobenzene, see	1663	6.1		3-Pentanol, see	1105	3	
PACKAGINGS, DISCARDED, EMPTY, UNCLEARED	3509	9		1-PENTENE	1108	3	
PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	1263 3066 3469 3470	3 8 3 8		1-PENTOL	2705	8	
PAINT RELATED MATERIAL (including paint thinning and reducing compound)	1263 3066 3469 3470	3 8 3 8		PENTOLITE, dry or wetted with less than 15 % water, by mass	0151	1	
Paint thinning and reducing compound, see	1263 3066 3469 3470	3 8 3 8		Pentyl nitrite, see	1113	3	
PAPER, UNSATURATED OIL TREATED, incompletely dried (including carbon paper)	1379	4.2		PERCHLORATES, INORGANIC, N.O.S.	1481	5.1	
Paraffin, see	1223	3		PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	3211	5.1	
PARAFORMALDEHYDE	2213	4.1		PERCHLORIC ACID with more than 50 % but not more than 72 % acid, by mass	1873	5.1	
PARALDEHYDE	1264	3		PERCHLORIC ACID with not more than 50 % acid, by mass	1802	8	
PCBs, see	2315 3432	9 9		Perchlorobenzene, see	2729	6.1	
PENTABORANE	1380	4.2		Perchlorocyclopentadiene, see	2646	6.1	
PENTACHLOROETHANE	1669	6.1		Perchloroethylene, see	1897	6.1	
PENTACHLOROPHENOL	3155	6.1		PERCHLOROMETHYL MERCAPTAN	1670	6.1	

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PERCHLORYL FLUORIDE	3083	2		Petroleum spirit, see	1268	3	
Perfluoroacetylchloride, see	3057	2		PHENACYL BROMIDE	2645	6.1	
PERFLUORO (ETHYL VINYL ETHER)	3154	2		PHENETIDINES	2311	6.1	
PERFLUORO (METHYL VINYL ETHER)	3153	2		PHENOLATES, LIQUID	2904	8	
Perfluoropropane, see	2424	2		PHENOLATES, SOLID	2905	8	
PERFUMERY PRODUCTS with flammable solvents	1266	3		PHENOL, MOLTEN	2312	6.1	
PERMANGANATES, INORGANIC, N.O.S.	1482	5.1		PHENOL, SOLID	1671	6.1	
PERMANGANATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	3214	5.1		PHENOL SOLUTION	2821	6.1	
PEROXIDES, INORGANIC, N.O.S.	1483	5.1		PHENOLSULPHONIC ACID, LIQUID	1803	8	
PERSULPHATES, INORGANIC, N.O.S.	3215	5.1		PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	3346	3	
PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	3216	5.1		PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC	3348	6.1	
PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash-point less than 23 °C	3021	3		PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3347	6.1	
PESTICIDE, LIQUID, TOXIC, N.O.S.	2902	6.1		PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC	3345	6.1	
PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S., flash-point not less than 23 °C	2903	6.1		PHENYLACETONITRILE, LIQUID	2470	6.1	
PESTICIDE, SOLID, TOXIC, N.O.S.	2588	6.1		PHENYLACETYL CHLORIDE	2577	8	
Pesticide, toxic, under compressed gas, n.o.s, see	1950	2		Phenylamine, see	1547	6.1	
PETN, see	0150 0411 3344	1 1 4.1		1-Phenylbutane, see	2709	3	
PETN/TNT, see	0151	1		2-Phenylbutane, see	2709	3	
PETROL	1203	3		PHENYL CARBYLAMINE CHLORIDE	1672	6.1	
Petrol and ethanol mixture, with more than 10 % ethanol, see	3475	3		PHENYL CHLOROFORMATE	2746	6.1	
PETROLEUM CRUDE OIL	1267	3		Phenyl cyanide, see	2224	6.1	
PETROLEUM DISTILLATES, N.O.S.	1268	3		PHENYLENEDIAMINES (o-, m-, p-)	1673	6.1	
Petroleum ether, see	1268	3		Phenylethylene, see	2055	3	
PETROLEUM GASES, LIQUEFIED	1075	2		PHENYLHYDRAZINE	2572	6.1	
Petroleum naphtha, see	1268	3		PHENYL ISOCYANATE	2487	6.1	
Petroleum oil, see	1268	3		Phenylisocyanodichloride, see	1672	6.1	
PETROLEUM PRODUCTS, N.O.S.	1268	3		PHENYL MERCAPTAN	2337	6.1	
Petroleum raffinate, see	1268	3		PHENYLMERCURIC ACETATE	1674	6.1	
PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3494	3		PHENYLMERCURIC COMPOUND, N.O.S.	2026	6.1	
				PHENYLMERCURIC HYDROXIDE	1894	6.1	
				PHENYLMERCURIC NITRATE	1895	6.1	
				PHENYLPHOSPHORUS DICHLORIDE	2798	8	

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PHENYLPHOSPHORUS THIODICHLORIDE	2799	8		PHOSPHORUS, WHITE, MOLTEN	2447	4.2	
2-Phenylpropene, see	2303	3		PHOSPHORUS, WHITE, UNDER WATER	1381	4.2	
PHENYLTRICHLOROSILANE	1804	8		PHOSPHORUS, YELLOW, DRY	1381	4.2	
PHOSGENE	1076	2		PHOSPHORUS, YELLOW, IN SOLUTION	1381	4.2	
9-PHOSPHABICYCLO-NONANES	2940	4.2		PHOSPHORUS, YELLOW, UNDER WATER	1381	4.2	
PHOSPHINE	2199	2		Phosphoryl chloride, see	1810	6.1	
PHOSPHINE, ADSORBED	3525	2		PHTHALIC ANHYDRIDE with more than 0.05 % of maleic anhydride	2214	8	
Phosphoretted hydrogen, see	2199	2		PICOLINES	2313	3	
PHOSPHORIC ACID, SOLUTION	1805	8		PICRAMIDE, see	0153	1	
PHOSPHORIC ACID, SOLID	3453	8		PICRIC ACID, WETTED, see	1344	4.1	
Phosphoric acid, anhydrous, see	1807	8			3364	4.1	
PHOSPHOROUS ACID	2834	8		PICRITE, see	0282	1	
PHOSPHORUS, AMORPHOUS	1338	4.1		PICRITE, WETTED, see	1336	4.1	
Phosphorus bromide, see	1808	8		Picrotoxin, see	3172	6.1	
Phosphorus chloride, see	1809	6.1			3462	6.1	
PHOSPHORUS HEPTASULPHIDE, free from yellow and white phosphorus	1339	4.1		PICRYL CHLORIDE, see	0155	1	
PHOSPHORUS OXYBROMIDE	1939	8		PICRYL CHLORIDE, WETTED, see	3365	4.1	
PHOSPHORUS OXYBROMIDE, MOLTEN	2576	8		alpha-PINENE	2368	3	
PHOSPHORUS OXYCHLORIDE	1810	6.1		PINE OIL	1272	3	
PHOSPHORUS PENTABROMIDE	2691	8		PIPERAZINE	2579	8	
PHOSPHORUS PENTACHLORIDE	1806	8		PIPERIDINE	2401	8	
PHOSPHORUS PENTAFLUORIDE	2198	2		Pivaloyl chloride, see	2438	6.1	
PHOSPHORUS PENTAFLUORIDE, ADSORBED	3524	2		Plastic explosives, see	0084	1	
PHOSPHORUS PENTASULPHIDE, free from yellow and white phosphorus	1340	4.3		PLASTICS MOULDING COMPOUND in dough, sheet or extruded rope form evolving flammable vapour	3314	9	
PHOSPHORUS PENTOXIDE	1807	8		PLASTICS, NITROCELLULOSE-BASED, SELF-HEATING, N.O.S.	2006	4.2	
PHOSPHORUS SESQUISULPHIDE, free from yellow and white phosphorus	1341	4.1		Polish, see	1263	3	
Phosphorus (V) sulphide, free from yellow and white phosphorus, see	1340	4.3			3066	8	
Phosphorus sulphochloride, see	1837	8			3469	3	
PHOSPHORUS TRIBROMIDE	1808	8			3470	8	
PHOSPHORUS TRICHLORIDE	1809	6.1		POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S.	2733	3	
PHOSPHORUS TRIOXIDE	2578	8		POLYAMINES, LIQUID, CORROSIVE, N.O.S.	2735	8	
PHOSPHORUS TRISULPHIDE, free from yellow and white phosphorus	1343	4.1		POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.	2734	8	
PHOSPHORUS, WHITE, DRY	1381	4.2		POLYAMINES, SOLID, CORROSIVE, N.O.S.	3259	8	
PHOSPHORUS, WHITE IN SOLUTION	1381	4.2		POLYCHLORINATED BIPHENYLS, LIQUID	2315	9	



Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
POLYCHLORINATED BIPHENYLS, SOLID	3432	9		POTASSIUM FLUORIDE, SOLUTION	3422	6.1	
POLYESTER RESIN KIT, liquid base material	3269	3		POTASSIUM FLUOROACETATE	2628	6.1	
POLYESTER RESIN KIT, solid base material	3527	4.1		POTASSIUM FLUOROSILICATE	2655	6.1	
POLYHALOGENATED BIPHENYLS, LIQUID	3151	9		Potassium hexafluorosilicate, see	2655	6.1	
POLYHALOGENATED BIPHENYLS, SOLID	3152	9		Potassium hydrate, see	1814	8	
POLYHALOGENATED TERPHENYLS, LIQUID	3151	9		POTASSIUM HYDROGENDIFLUORIDE, SOLID	1811	8	
POLYHALOGENATED TERPHENYLS, SOLID	3152	9		POTASSIUM HYDROGENDIFLUORIDE, SOLUTION	3421	8	
POLYMERIC BEADS, EXPANDABLE, evolving flammable vapour	2211	9		POTASSIUM HYDROGEN SULPHATE	2509	8	
POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.	3532	4.1		POTASSIUM HYDROSULPHITE, see	1929	4.2	
POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S.	3534	4.1		Potassium hydroxide, liquid, see	1814	8	
POLYMERIZING SUBSTANCE, SOLID, STABILIZED, N.O.S.	3531	4.1		POTASSIUM HYDROXIDE, SOLID	1813	8	
POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S.	3533	4.1		POTASSIUM HYDROXIDE SOLUTION	1814	8	
Polystyrene beads, expandable, see	2211	9		POTASSIUM METAL ALLOYS, LIQUID	1420	4.3	
POTASSIUM	2257	4.3		POTASSIUM METAL ALLOYS, SOLID	3403	4.3	
POTASSIUM ARSENATE	1677	6.1		POTASSIUM METAVANADATE	2864	6.1	
POTASSIUM ARSENITE	1678	6.1		POTASSIUM MONOXIDE	2033	8	
Potassium bifluoride, see	1811	8		POTASSIUM NITRATE	1486	5.1	
Potassium bisulphate, see	2509	8		Potassium nitrate and sodium nitrate mixture, see	1499	5.1	
Potassium bisulphite solution, see	2693	8		POTASSIUM NITRATE AND SODIUM NITRITE MIXTURE	1487	5.1	
POTASSIUM BOROHYDRIDE	1870	4.3		POTASSIUM NITRITE	1488	5.1	
POTASSIUM BROMATE	1484	5.1		POTASSIUM PERCHLORATE	1489	5.1	
POTASSIUM CHLORATE	1485	5.1		POTASSIUM PERMANGANATE	1490	5.1	
POTASSIUM CHLORATE, AQUEOUS SOLUTION	2427	5.1		POTASSIUM PEROXIDE	1491	5.1	
Potassium chlorate mixed with mineral oil, see	0083	1		POTASSIUM PERSULPHATE	1492	5.1	
POTASSIUM CUPROCYANIDE	1679	6.1		POTASSIUM PHOSPHIDE	2012	4.3	
POTASSIUM CYANIDE, SOLID	1680	6.1		Potassium selenate, see	2630	6.1	
POTASSIUM CYANIDE, SOLUTION	3413	6.1		Potassium selenite, see	2630	6.1	
Potassium dicyanocuprate (I), see	1679	6.1		Potassium silicofluoride, see	2655	6.1	
POTASSIUM DITHIONITE	1929	4.2		POTASSIUM SODIUM ALLOYS, LIQUID	1422	4.3	
POTASSIUM FLUORIDE, SOLID	1812	6.1		POTASSIUM SODIUM ALLOYS, SOLID	3404	4.3	
				POTASSIUM SULPHIDE with less than 30 % water of crystallization	1382	4.2	

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POTASSIUM SULPHIDE, ANHYDROUS	1382	4.2		PROPANETHIOLS	2402	3	
POTASSIUM SULPHIDE, HYDRATED with not less than 30 % water of crystallization	1847	8		n-PROPANOL	1274	3	
POTASSIUM SUPEROXIDE	2466	5.1		PROPELLANT, LIQUID	0495	1	
Potassium tetracyanomercurate (II), see	1626	6.1			0497	1	
POWDER CAKE, WETTED with not less than 17 % alcohol, by mass	0433	1		PROPELLANT, SOLID	0498	1	
POWDER CAKE, WETTED with not less than 25 % water, by mass	0159	1			0499	1	
POWDER PASTE, see	0159	1			0501	1	
	0433	1		Propellant with a single base,	0160	1	
POWDER, SMOKELESS	0160	1		Propellant with a double base,	0161	1	
	0161	1		Propellant with a triple base, see			
	0509	1		Propene, see	1077	2	
Power devices, explosive, see	0275	1		PROPIONALDEHYDE	1275	3	
	0276	1		PROPIONIC ACID with not less than 10 % and less than 90 % acid by mass	1848	8	
	0323	1		PROPIONIC ACID with not less than 90 % acid by mass	3463	8	
	0381	1		PROPIONIC ANHYDRIDE	2496	8	
PRIMERS, CAP TYPE	0044	1		PROPIONITRILE	2404	3	
	0377	1		PROPIONYL CHLORIDE	1815	3	
	0378	1		n-PROPYL ACETATE	1276	3	
Primers, small arms, see	0044	1		PROPYL ALCOHOL, NORMAL, see	1274	3	
PRIMERS, TUBULAR	0319	1		PROPYLAMINE	1277	3	
	0320	1		n-PROPYLBENZENE	2364	3	
	0376	1		Propyl chloride, see	1278	3	
PRINTING INK, flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	1210	3		n-PROPYL CHLOROFORMATE	2740	6.1	
Projectiles, illuminating, see	0171	1		PROPYLENE	1077	2	
	0254	1		PROPYLENE CHLOROHYDRIN	2611	6.1	
	0297	1		1,2-PROPYLENEDIAMINE	2258	8	
PROJECTILES, inert with tracer	0345	1		Propylene dichloride, see	1279	3	
	0424	1		PROPYLENEIMINE, STABILIZED	1921	3	
	0425	1		PROPYLENE OXIDE	1280	3	
PROJECTILES with burster or expelling charge	0346	1		PROPYLENE TETRAMER	2850	3	
	0347	1		Propylene trimer, see	2057	3	
	0426	1		PROPYL FORMATES	1281	3	
	0427	1		n-PROPYL ISOCYANATE	2482	6.1	
	0434	1		Propyl mercaptan, see	2402	3	
	0435	1		n-PROPYL NITRATE	1865	3	
PROJECTILES with bursting charge	0167	1		PROPYLTRICHLOROSILANE	1816	8	
	0168	1		Pyrazine hexahydride, see	2579	8	
	0169	1		PYRETHROID PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	3350	3	
	0324	1		PYRETHROID PESTICIDE, LIQUID, TOXIC	3352	6.1	
	0344	1					
PROPADIENE, STABILIZED	2200	2					
Propadiene and methyl acetylene mixture, stabilized, see	1060	2					
PROPANE	1978	2					

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PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3351	6.1		RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-III), FISSILE	3325	7	
PYRETHROID PESTICIDE, SOLID, TOXIC	3349	6.1		RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-III), non fissile or fissile-excepted	3322	7	
PYRIDINE	1282	3		RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-I or SCO-II), FISSILE	3326	7	
PYROPHORIC ALLOY, N.O.S.	1383	4.2		RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-I, SCO-II or SCO-III), non fissile or fissile-excepted	2913	7	
Pyrophoric organometallic compound, water-reactive, n.o.s., liquid, see	3394	4.2		RADIOACTIVE MATERIAL, TRANSPORTED UNDER SPECIAL ARRANGEMENT, FISSILE	3331	7	
Pyrophoric organometallic compound, water-reactive, n.o.s., solid, see	3393	4.2		RADIOACTIVE MATERIAL, TRANSPORTED UNDER SPECIAL ARRANGEMENT, non fissile or fissile-excepted	2919	7	
PYROPHORIC LIQUID, INORGANIC, N.O.S.	3194	4.2		RADIOACTIVE MATERIAL, TYPE A PACKAGE, FISSILE, non-special form	3327	7	
PYROPHORIC LIQUID, ORGANIC, N.O.S.	2845	4.2		RADIOACTIVE MATERIAL, TYPE A PACKAGE, non-special form, non fissile or fissile-excepted	2915	7	
PYROPHORIC METAL, N.O.S.	1383	4.2		RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, FISSILE	3333	7	
PYROPHORIC SOLID, INORGANIC, N.O.S.	3200	4.2		RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, non fissile or fissile-excepted	3332	7	
PYROPHORIC SOLID, ORGANIC, N.O.S.	2846	4.2		RADIOACTIVE MATERIAL, TYPE B(M) PACKAGE, FISSILE	3329	7	
PYROSULPHURYL CHLORIDE	1817	8		RADIOACTIVE MATERIAL, TYPE B(M) PACKAGE, non fissile or fissile-excepted	2917	7	
Pyroxylin solution, see	2059	3		RADIOACTIVE MATERIAL, TYPE B(U) PACKAGE, FISSILE	3328	7	
PYRROLIDINE	1922	3		RADIOACTIVE MATERIAL, TYPE B(U) PACKAGE, non fissile or fissile-excepted	2916	7	
QUINOLINE	2656	6.1		RADIOACTIVE MATERIAL, TYPE C PACKAGE, FISSILE	3330	7	
Quinone, see	2587	6.1		RADIOACTIVE MATERIAL, TYPE C PACKAGE, non fissile or fissile-excepted	3323	7	
RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - ARTICLES MANUFACTURED FROM NATURAL URANIUM or DEPLETED URANIUM or NATURAL THORIUM	2909	7		RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, FISSILE	2977	7	
RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - EMPTY PACKAGING	2908	7		RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, non fissile or fissile-excepted	2978	7	
RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - INSTRUMENTS or ARTICLES	2911	7					
RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL	2910	7					
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I), non fissile or fissile-excepted	2912	7					
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-II), FISSILE	3324	7					
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-II), non fissile or fissile-excepted	3321	7					



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Rags, oily	1856	4.2	Not subject to ADR	REFRIGERANT GAS R 1318, see	2422	2	
RDX, see	0072	1		REFRIGERANT GAS RC 318, see	1976	2	
	0391	1		REFRIGERATING MACHINES containing flammable, non-toxic, liquefied gas	3358	2	
	0483	1		REFRIGERATING MACHINES containing non-flammable, non-toxic, gases or ammonia solutions (UN 2672)	2857	2	
RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable	2037	2		REGULATED MEDICAL WASTE, N.O.S.	3291	6.2	
Red phosphorus, see	1338	4.1		RELEASE DEVICES, EXPLOSIVE	0173	1	
REFRIGERANT GAS, N.O.S., such as mixture F1, mixture F2 or mixture P2	1078	2		RESIN SOLUTION, flammable	1866	3	
REFRIGERANT GAS R 12, see	1028	2		Resorcin, see	2876	6.1	
REFRIGERANT GAS R 12B1, see	1974	2		RESORCINOL	2876	6.1	
REFRIGERANT GAS R 13, see	1022	2		RIVETS, EXPLOSIVE	0174	1	
REFRIGERANT GAS R 13B1, see	1009	2		Road oil, with a flash-point not greater than 60 °C, see	1999	3	
REFRIGERANT GAS R 14, see	1982	2		Road oil, with a flash-point above 60 °C, at or above its flash-point, see	3256	3	
REFRIGERANT GAS R 21, see	1029	2		Road oil, at or above 100 °C and below its flash-point, see	3257	9	
REFRIGERANT GAS R 22, see	1018	2		ROCKET MOTORS	0186	1	
REFRIGERANT GAS R 23, see	1984	2			0280	1	
REFRIGERANT GAS R 32, see	3252	2			0281	1	
REFRIGERANT GAS R 40, see	1063	2			0510	1	
REFRIGERANT GAS R 41, see	2454	2		ROCKET MOTORS, LIQUID FUELLED	0395	1	
REFRIGERANT GAS R 114, see	1958	2			0396	1	
REFRIGERANT GAS R 115, see	1020	2		ROCKET MOTORS WITH HYPERGOLIC LIQUIDS with or without expelling charge	0250	1	
REFRIGERANT GAS R 116, see	2193	2			0322	1	
REFRIGERANT GAS R 124, see	1021	2		ROCKETS with bursting charge	0180	1	
REFRIGERANT GAS R 125, see	3220	2			0181	1	
REFRIGERANT GAS R 133a, see	1983	2			0182	1	
REFRIGERANT GAS R 134a, see	3159	2			0295	1	
REFRIGERANT GAS R 142b, see	2517	2		ROCKETS with expelling charge	0436	1	
REFRIGERANT GAS R 143a, see	2035	2			0437	1	
REFRIGERANT GAS R 152a, see	1030	2			0438	1	
REFRIGERANT GAS R 161, see	2453	2		ROCKETS with inert head	0183	1	
REFRIGERANT GAS R 218, see	2424	2			0502	1	
REFRIGERANT GAS R 227, see	3296	2		ROCKETS, LINE-THROWING	0238	1	
REFRIGERANT GAS R 404A	3337	2			0240	1	
REFRIGERANT GAS R 407A	3338	2			0453	1	
REFRIGERANT GAS R 407B	3339	2		ROCKETS, LIQUID FUELLED with bursting charge	0397	1	
REFRIGERANT GAS R 407C	3340	2			0398	1	
REFRIGERANT GAS R 500, see	2602	2		ROSIN OIL	1286	3	
REFRIGERANT GAS R 502, see	1973	2		RUBBER SCRAP, powdered or granulated, not exceeding 840 microns and rubber content exceeding 45 %	1345	4.1	
REFRIGERANT GAS R 503, see	2599	2					
REFRIGERANT GAS R 1132a, see	1959	2					
REFRIGERANT GAS R 1216, see	1858	2					

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RUBBER SHODDY, powdered or granulated, not exceeding 840 microns and rubber content exceeding 45 %	1345	4.1		SELF-HEATING SOLID, CORROSIVE, INORGANIC, N.O.S.	3192	4.2	
RUBBER SOLUTION	1287	3		SELF-HEATING SOLID, CORROSIVE, ORGANIC, N.O.S.	3126	4.2	
RUBIDIUM	1423	4.3		SELF-HEATING SOLID, INORGANIC, N.O.S.	3190	4.2	
RUBIDIUM HYDROXIDE	2678	8		SELF-HEATING SOLID, ORGANIC, N.O.S.	3088	4.2	
RUBIDIUM HYDROXIDE SOLUTION	2677	8		SELF-HEATING SOLID, OXIDIZING, N.O.S.	3127	4.2	Carriage prohibited
Rubidium nitrate, see	1477	5.1		SELF-HEATING SOLID, TOXIC, INORGANIC, N.O.S.	3191	4.2	
SAFETY DEVICES, electrically initiated	3268	9		SELF-HEATING SOLID, TOXIC, ORGANIC, N.O.S.	3128	4.2	
SAFETY DEVICES, PYROTECHNIC	0503	1		SELF-REACTIVE LIQUID TYPE B	3221	4.1	
Saltpetre, see	1486	5.1		SELF-REACTIVE LIQUID TYPE B, TEMPERATURE CONTROLLED	3231	4.1	
SAMPLES, EXPLOSIVE, other than initiating explosive	0190	1		SELF-REACTIVE LIQUID TYPE C	3223	4.1	
Sand acid, see	1778	8		SELF-REACTIVE LIQUID TYPE C, TEMPERATURE CONTROLLED	3233	4.1	
Seat-belt pretensioners, see	0503	1		SELF-REACTIVE LIQUID TYPE D	3225	4.1	
SEED CAKE with more than 1.5 % oil and not more than 11 % moisture	1386	4.2		SELF-REACTIVE LIQUID TYPE D, TEMPERATURE CONTROLLED	3235	4.1	
SEED CAKE with not more than 1.5 % oil and not more than 11 % moisture	2217	4.2		SELF-REACTIVE LIQUID TYPE E	3227	4.1	
Seed expellers, see	1386	4.2		SELF-REACTIVE LIQUID TYPE E, TEMPERATURE CONTROLLED	3237	4.1	
	2217	4.2		SELF-REACTIVE LIQUID TYPE F	3229	4.1	
SELENATES	2630	6.1		SELF-REACTIVE LIQUID TYPE F, TEMPERATURE CONTROLLED	3239	4.1	
SELENIC ACID	1905	8		SELF-REACTIVE SOLID TYPE B	3222	4.1	
SELENITES	2630	6.1		SELF-REACTIVE SOLID TYPE B, TEMPERATURE CONTROLLED	3232	4.1	
SELENIUM COMPOUND, LIQUID, N.O.S.	3440	6.1		SELF-REACTIVE SOLID TYPE C	3224	4.1	
SELENIUM COMPOUND, SOLID, N.O.S.	3283	6.1		SELF-REACTIVE SOLID TYPE C, TEMPERATURE CONTROLLED	3234	4.1	
SELENIUM DISULPHIDE	2657	6.1		SELF-REACTIVE SOLID TYPE D	3226	4.1	
SELENIUM HEXAFLUORIDE	2194	2		SELF-REACTIVE SOLID TYPE D, TEMPERATURE CONTROLLED	3236	4.1	
SELENIUM OXYCHLORIDE	2879	8		SELF-REACTIVE SOLID TYPE E	3228	4.1	
SELF-HEATING LIQUID, CORROSIVE, INORGANIC, N.O.S.	3188	4.2		SELF-REACTIVE SOLID TYPE E, TEMPERATURE CONTROLLED	3238	4.1	
SELF-HEATING LIQUID, CORROSIVE, ORGANIC, N.O.S.	3185	4.2		SELF-REACTIVE SOLID TYPE F	3230	4.1	
SELF-HEATING LIQUID, INORGANIC, N.O.S.	3186	4.2		SELF-REACTIVE SOLID TYPE F, TEMPERATURE CONTROLLED	3240	4.1	
SELF-HEATING LIQUID, ORGANIC, N.O.S.	3183	4.2		SHALE OIL	1288	3	
SELF-HEATING LIQUID, TOXIC, INORGANIC, N.O.S.	3187	4.2					
SELF-HEATING LIQUID, TOXIC, ORGANIC, N.O.S.	3184	4.2					

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Shaped charges, see	0059	1		SODIUM ARSANILATE	2473	6.1	
	0439	1		SODIUM ARSENATE	1685	6.1	
	0440	1		SODIUM ARSENITE, AQUEOUS SOLUTION	1686	6.1	
	0441	1		SODIUM ARSENITE, SOLID	2027	6.1	
Shellac, see	1263	3		SODIUM AZIDE	1687	6.1	
	3066	8		Sodium bifluoride, see	2439	8	
	3469	3		Sodium binoxide, see	1504	5.1	
	3470	8		Sodium bisulphite solution, see	2693	8	
SIGNAL DEVICES, HAND	0191	1		SODIUM BOROHYDRIDE	1426	4.3	
	0373	1		SODIUM BOROHYDRIDE AND SODIUM HYDROXIDE SOLUTION, with not more than 12 % sodium borohydride and not more than 40 % sodium hydroxide by mass	3320	8	
SIGNALS, DISTRESS, ship	0194	1		SODIUM BROMATE	1494	5.1	
	0195	1		SODIUM CACODYLATE	1688	6.1	
	0505	1		SODIUM CARBONATE PEROXYHYDRATE	3378	5.1	
	0506	1		SODIUM CHLORATE	1495	5.1	
Signals, distress, ship, water-activated, see	0249	1		SODIUM CHLORATE, AQUEOUS SOLUTION	2428	5.1	
SIGNALS, RAILWAY TRACK, EXPLOSIVE	0192	1		Sodium chlorate mixed with dinitrotoluene, see	0083	1	
	0193	1		SODIUM CHLORITE	1496	5.1	
	0492	1		SODIUM CHLOROACETATE	2659	6.1	
	0493	1		SODIUM CUPROCYANIDE, SOLID	2316	6.1	
SIGNALS, SMOKE	0196	1		SODIUM CUPROCYANIDE SOLUTION	2317	6.1	
	0197	1		SODIUM CYANIDE, SOLID	1689	6.1	
	0313	1		SODIUM CYANIDE, SOLUTION	3414	6.1	
	0487	1		Sodium dicyanocuprate (I), solid, see	2316	6.1	
	0507	1		Sodium dicyanocuprate (I) solution, see	2317	6.1	
SILANE	2203	2		Sodium dimethylarsenate, see	1688	6.1	
Silicofluoric acid, see	1778	8		SODIUM DINITRO-o-CRESOLATE, dry or wetted with less than 15 % water, by mass	0234	1	
Silicofluorides, n.o.s., see	2856	6.1		SODIUM DINITRO-o-CRESOLATE, WETTED with not less than 10 % water, by mass	3369	4.1	
Silicon chloride, see	1818	8		SODIUM DINITRO-o-CRESOLATE, WETTED with not less than 15 % water, by mass	1348	4.1	
SILICON POWDER, AMORPHOUS	1346	4.1		Sodium dioxide, see	1504	5.1	
SILICON TETRACHLORIDE	1818	8		SODIUM DITHIONITE	1384	4.2	
SILICON TETRAFLUORIDE	1859	2		SODIUM FLUORIDE, SOLID	1690	6.1	
SILICON TETRAFLUORIDE, ADSORBED	3521	2					
SILVER ARSENITE	1683	6.1					
SILVER CYANIDE	1684	6.1					
SILVER NITRATE	1493	5.1					
SILVER PICRATE, WETTED with not less than 30 % water, by mass	1347	4.1					
SLUDGE ACID	1906	8					
SODA LIME with more than 4 % sodium hydroxide	1907	8					
SODIUM	1428	4.3					
Sodium aluminate, solid	2812	8	Not subject to ADR				
SODIUM ALUMINATE SOLUTION	1819	8					
SODIUM ALUMINIUM HYDRIDE	2835	4.3					
SODIUM AMMONIUM VANADATE	2863	6.1					



Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
SODIUM FLUORIDE, SOLUTION	3415	6.1		SODIUM PEROXOBORATE, ANHYDROUS	3247	5.1	
SODIUM FLUOROACETATE	2629	6.1		SODIUM PERSULPHATE	1505	5.1	
SODIUM FLUOROSILICATE	2674	6.1		SODIUM PHOSPHIDE	1432	4.3	
Sodium hexafluorosilicate, see	2674	6.1		SODIUM PICRAMATE, dry or wetted with less than 20 % water, by mass	0235	1	
Sodium hydrate, see	1824	8		SODIUM PICRAMATE, WETTED with not less than 20 % water, by mass	1349	4.1	
SODIUM HYDRIDE	1427	4.3		Sodium potassium alloys, liquid, see	1422	4.3	
Sodium hydrogen 4-amino-phenylarsenate, see	2473	6.1		Sodium selenate, see	2630	6.1	
SODIUM HYDROGEN-DIFLUORIDE	2439	8		Sodium selenite, see	2630	6.1	
SODIUM HYDROSULPHIDE with less than 25 % water of crystallization	2318	4.2		Sodium silicofluoride, see	2674	6.1	
SODIUM HYDROSULPHIDE, HYDRATED with not less than 25 % water of crystallization	2949	8		SODIUM SULPHIDE, ANHYDROUS	1385	4.2	
SODIUM HYDROSULPHITE, see	1384	4.2		SODIUM SULPHIDE with less than 30 % water of crystallization	1385	4.2	
SODIUM HYDROXIDE, SOLID	1823	8		SODIUM SULPHIDE, HYDRATED with not less than 30 % water	1849	8	
SODIUM HYDROXIDE SOLUTION	1824	8		SODIUM SUPEROXIDE	2547	5.1	
SODIUM ION BATTERIES CONTAINED IN EQUIPMENT, with organic electrolyte	3552	9		SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S.	3244	8	
SODIUM ION BATTERIES PACKED WITH EQUIPMENT, with organic electrolyte	3552	9		SOLIDS or mixtures of solids (such as preparations and wastes) CONTAINING FLAMMABLE LIQUID, N.O.S. having a flash-point up to 60 °C	3175	4.1	
SODIUM ION BATTERIES with organic electrolyte	3551	9		SOLIDS CONTAINING TOXIC LIQUID, N.O.S.	3243	6.1	
Sodium metasilicate pentahydrate, see	3253	8		Solvents, flammable, n.o.s., see	1993	3	
SODIUM METHYLATE	1431	4.2		Solvents, flammable, toxic, n.o.s., see	1992	3	
SODIUM METHYLATE SOLUTION in alcohol	1289	3		SOUNDING DEVICES, EXPLOSIVE	0204 0296 0374 0375	1 1 1 1	
SODIUM MONOXIDE	1825	8		Squibs, see	0325 0454	1 1	
SODIUM NITRATE	1498	5.1		Stain, see	1263 3066 3469 3470	3 8 3 8	
SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	1499	5.1		STANNIC CHLORIDE, ANHYDROUS	1827	8	
SODIUM NITRITE	1500	5.1		STANNIC CHLORIDE PENTAHYDRATE	2440	8	
Sodium nitrite and potassium nitrate mixture, see	1487	5.1		STANNIC PHOSPHIDES	1433	4.3	
SODIUM PENTACHLOROHENATE	2567	6.1		Steel swarf, see	2793	4.2	
SODIUM PERBORATE MONOHYDRATE	3377	5.1		STIBINE	2676	2	
SODIUM PERCHLORATE	1502	5.1		Straw	1327	4.1	Not subject to ADR
SODIUM PERMANGANATE	1503	5.1					
SODIUM PEROXIDE	1504	5.1					

Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
Strontium alloys, pyrophoric, see	1383	4.2		Sulphuretted hydrogen, see	1053	2	
STRONTIUM ARSENITE	1691	6.1		SULPHUR HEXAFLUORIDE	1080	2	
STRONTIUM CHLORATE	1506	5.1		SULPHURIC ACID with more than 51 % acid	1830	8	
Strontium dioxide, see	1509	5.1		SULPHURIC ACID with not more than 51 % acid	2796	8	
STRONTIUM NITRATE	1507	5.1		SULPHURIC ACID, FUMING	1831	8	
STRONTIUM PERCHLORATE	1508	5.1		SULPHURIC ACID, SPENT	1832	8	
STRONTIUM PEROXIDE	1509	5.1		Sulphuric and hydrofluoric acid mixture, see	1786	8	
STRONTIUM PHOSPHIDE	2013	4.3		SULPHUR, MOLTEN	2448	4.1	
STRYCHNINE	1692	6.1		Sulphur monochloride, see	1828	8	
STRYCHNINE SALTS	1692	6.1		SULPHUROUS ACID	1833	8	
STYPHNIC ACID, see	0219	1		SULPHUR TETRAFLUORIDE	2418	2	
	0394	1		SULPHUR TRIOXIDE, STABILIZED	1829	8	
STYRENE MONOMER, STABILIZED	2055	3		SULPHURYL CHLORIDE	1834	6.1	
SUBSTANCES, EVI, N.O.S., see	0482	1		SULPHURYL FLUORIDE	2191	2	
SUBSTANCES, EXPLOSIVE, N.O.S.	0357	1		Table Tennis Balls, see	2000	4.1	
	0358	1		Talcum with tremolite and/or actinolite, see	2212	9	
	0359	1		TARS, LIQUID, including road oils, and cutback bitumens, with a flash-point not greater than 60 °C	1999	3	
	0473	1		Tars, liquid, with a flash-point above 60 °C, at or above its flash-point, see	3256	3	
	0474	1					
	0475	1		Tars, liquid, at or above 100 °C and below its flash-point, see	3257	9	
	0476	1		Tartar emetic, see	1551	6.1	
	0477	1		TEAR GAS CANDLES	1700	6.1	
	0478	1		TEAR GAS SUBSTANCE, LIQUID, N.O.S.	1693	6.1	
	0479	1		TEAR GAS SUBSTANCE, SOLID, N.O.S.	3448	6.1	
	0480	1		TELLURIUM COMPOUND, N.O.S.	3284	6.1	
	0481	1		TELLURIUM HEXAFLUORIDE	2195	2	
	0485	1		TERPENE HYDROCARBONS, N.O.S.	2319	3	
SUBSTANCES, EXPLOSIVE, VERY INSENSITIVE, N.O.S.	0482	1		TERPINOLENE	2541	3	
Substances liable to spontaneous combustion, n.o.s., see	2845	4.2		TETRABROMOETHANE	2504	6.1	
	2846	4.2		1,1,2,2-TETRACHLOROETHANE	1702	6.1	
	3194	4.2		TETRACHLOROETHYLENE	1897	6.1	
	3200	4.2		TETRAETHYL DITHIO-PYROPHOSPHATE	1704	6.1	
SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2780	3		TETRAETHYLENEPENTAMINE	2320	8	
SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC	3014	6.1		Tetraethyl lead, see	1649	6.1	
SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3013	6.1					
SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC	2779	6.1					
SULPHAMIC ACID	2967	8					
SULPHUR	1350	4.1					
SULPHUR CHLORIDES	1828	8					
Sulphur dichloride, see	1828	8					
SULPHUR DIOXIDE	1079	2					

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TETRAETHYL SILICATE	1292	3		Thia-4-pentanal, see	2785	6.1	
Tetraethoxysilane, see	1292	3		THIOACETIC ACID	2436	3	
Tetrafluorodichloroethane, see	1958	2		THIOCARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2772	3	
1,1,1,2-TETRAFLUOROETHANE	3159	2		THIOCARBAMATE PESTICIDE, LIQUID, TOXIC	3006	6.1	
TETRAFLUOROETHYLENE, STABILIZED	1081	2		THIOCARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	3005	6.1	
TETRAFLUOROMETHANE	1982	2		THIOCARBAMATE PESTICIDE, SOLID, TOXIC	2771	6.1	
1,2,3,6-TETRAHYDRO-BENZALDEHYDE	2498	3		THIOGLYCOL	2966	6.1	
TETRAHYDROFURAN	2056	3		THIOGLYCOLIC ACID	1940	8	
TETRAHYDRO-FURFURYLAMINE	2943	3		THIOLACTIC ACID	2936	6.1	
Tetrahydro-1,4-oxazine, see	2054	3		THIONYL CHLORIDE	1836	8	
TETRAHYDROPHthalic ANHYDRIDES with more than 0.05 % of maleic anhydride	2698	8		THIOPHENE	2414	3	
1,2,3,6-TETRAHYDROPYRIDINE	2410	3		Thiophenol, see	2337	6.1	
TETRAHYDROTHIOPHENE	2412	3		THIOPHOSGENE	2474	6.1	
Tetramethoxysilane, see	2606	6.1		THIOPHOSPHORYL CHLORIDE	1837	8	
TETRAMETHYLAMMONIUM HYDROXIDE, SOLID	3423	6.1		THIOUREA DIOXIDE	3341	4.2	
TETRAMETHYLAMMONIUM HYDROXIDE AQUEOUS SOLUTION	3560 1835	6.1 8		Tin (IV) chloride, anhydrous, see	1827	8	
Tetramethylene, see	2601	2		Tin (IV) chloride pentahydrate, see	2440	8	
Tetramethylene cyanide, see	2205	6.1		TINCTURES, MEDICINAL	1293	3	
Tetramethyl lead, see	1649	6.1		Tin tetrachloride, see	1827	8	
TETRAMETHYLSILANE	2749	3		TITANIUM DISULPHIDE	3174	4.2	
TETRANITROANILINE	0207	1		TITANIUM HYDRIDE	1871	4.1	
TETRANITROMETHANE	1510	6.1		TITANIUM POWDER, DRY	2546	4.2	
TETRAPROPYL ORTHOTITANATE	2413	3		TITANIUM POWDER, WETTED with not less than 25 % water	1352	4.1	
TETRAZENE, WETTED with not less than 30 % water, or mixture of alcohol and water, by mass, see	0114	1		TITANIUM SPONGE GRANULES	2878	4.1	
TETRAZOL-1-ACETIC ACID	0407	1		TITANIUM SPONGE POWDERS	2878	4.1	
1H-TETRAZOLE	0504	1		TITANIUM TETRACHLORIDE	1838	6.1	
TETRYL, see	0208	1		TITANIUM TRICHLORIDE MIXTURE	2869	8	
Textile waste, wet	1857	4.2	Not subject to ADR	TITANIUM TRICHLORIDE MIXTURE, PYROPHORIC	2441	4.2	
THALLIUM CHLORATE	2573	5.1		TITANIUM TRICHLORIDE, PYROPHORIC	2441	4.2	
Thallium (I) chlorate, see	2573	5.1		TNT, see	0209 0388 0389	1 1 1	
THALLIUM COMPOUND, N.O.S.	1707	6.1		TNT mixed with aluminium, see	0390	1	
THALLIUM NITRATE	2727	6.1		TNT, WETTED with not less than 30 % water, by mass, see	1356	4.1	
Thallium (I) nitrate, see	2727	6.1		TNT, WETTED with not less than 10 % water, by mass, see	3366	4.1	
Thallous chlorate, see	2573	5.1					
4-THIAPENTANAL	2785	6.1					



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Toe puffs, nitrocellulose base, see	1353	4.1		TOXIC BY INHALATION LIQUID, 3488	6.1		
TOLUENE	1294	3		FLAMMABLE, CORROSIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>			
TOLUENE DIISOCYANATE	2078	6.1					
TOLUIDINES, LIQUID	1708	6.1		TOXIC BY INHALATION LIQUID, 3489	6.1		
TOLUIDINES, SOLID	3451	6.1		FLAMMABLE, CORROSIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>			
Toluol, see	1294	3					
2,4-TOLUYLENEDIAMINE, SOLID	1709	6.1		TOXIC BY INHALATION LIQUID, 3387	6.1		
2,4-TOLUYLENEDIAMINE, SOLUTION	3418	6.1		OXIDIZING, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>			
Toluylene diisocyanate, see	2078	6.1					
Tolylene diisocyanate, see	2078	6.1		TOXIC BY INHALATION LIQUID, 3388	6.1		
Tolyethylene, inhibited, see	2618	3		OXIDIZING, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>			
TORPEDOES with bursting charge	0329	1					
	0330	1		TOXIC BY INHALATION LIQUID, 3385	6.1		
	0451	1		WATER-REACTIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>			
TORPEDOES, LIQUID FUELLED with inert head	0450	1					
TORPEDOES, LIQUID FUELLED with or without bursting charge	0449	1		TOXIC BY INHALATION LIQUID, 3386	6.1		
TOXIC BY INHALATION LIQUID, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>	3381	6.1		WATER-REACTIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>			
TOXIC BY INHALATION LIQUID, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>	3382	6.1					
TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>	3389	6.1		TOXIC BY INHALATION LIQUID, 3490	6.1		
TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>	3390	6.1		WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>			
TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an LC <sub>50</sub> lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC <sub>50</sub>	3383	6.1					
TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>	3384	6.1		TOXIC BY INHALATION LIQUID, 3491	6.1		
				WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC <sub>50</sub> lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC <sub>50</sub>			
				TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.	3289	6.1	
				TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	2927	6.1	
				TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	2929	6.1	
				TOXIC LIQUID, INORGANIC, N.O.S.	3287	6.1	
				TOXIC LIQUID, ORGANIC, N.O.S.	2810	6.1	

Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
TOXIC LIQUID, OXIDIZING, N.O.S.	3122	6.1		TRICHLOROACETYL CHLORIDE	2442	8	
TOXIC LIQUID, WATER-REACTIVE, N.O.S.	3123	6.1		TRICHLOROBENZENES, LIQUID	2321	6.1	
TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S.	3290	6.1		TRICHLOROBUTENE	2322	6.1	
TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.	2928	6.1		1,1,1-TRICHLOROETHANE	2831	6.1	
TOXIC SOLID, FLAMMABLE, INORGANIC, N.O.S.	3535	6.1		TRICHLOROETHYLENE	1710	6.1	
TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.	2930	6.1		TRICHLOROISOCYANURIC ACID, DRY	2468	5.1	
TOXIC SOLID, INORGANIC, N.O.S.	3288	6.1		Trichloronitromethane, see	1580	6.1	
TOXIC SOLID, ORGANIC, N.O.S.	2811	6.1		TRICHLOROSILANE	1295	4.3	
TOXIC SOLID, OXIDIZING, N.O.S.	3086	6.1		1,3,5-Trichloro-s-triazine-2,4,6-trione, see	2468	5.1	
TOXIC SOLID, SELF-HEATING, N.O.S.	3124	6.1		2,4,6-Trichloro-1,3,5- triazine, see	2670	8	
TOXIC SOLID, WATER-REACTIVE, N.O.S.	3125	6.1		TRICRESYL PHOSPHATE with more than 3 % ortho isomer	2574	6.1	
TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	3172	6.1		TRIETHYLAMINE	1296	3	
TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.	3462	6.1		Triethyl borate, see	1176	3	
TRACERS FOR AMMUNITION	0212 0306	1 1		TRIETHYLENETETRAMINE	2259	8	
Tremolite, see	2212	9		Triethyl orthoformate, see	2524	3	
TRIALLYLAMINE	2610	3		TRIETHYL PHOSPHITE	2323	3	
TRIALLYL BORATE	2609	6.1		TRIFLUOROACETIC ACID	2699	8	
TRIAZINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flash-point less than 23 °C	2764	3		TRIFLUOROACETYL CHLORIDE	3057	2	
TRIAZINE PESTICIDE, LIQUID, TOXIC	2998	6.1		Trifluorobromomethane, see	1009	2	
TRIAZINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C	2997	6.1		Trifluorochloroethane, see	1983	2	
TRIAZINE PESTICIDE, SOLID, TOXIC	2763	6.1		TRIFLUOROCHLORO-ETHYLENE, STABILIZED, REFRIGERANT GAS R 1113	1082	2	
Tribromoborane, see	2692	8		Trifluorochloromethane, see	1022	2	
TRIBUTYLAMINE	2542	6.1		1,1,1-TRIFLUOROETHANE	2035	2	
TRIBUTYLPHOSPHANE	3254	4.2		TRIFLUOROMETHANE	1984	2	
Trichloroacetaldehyde, see	2075	6.1		TRIFLUOROMETHANE, REFRIGERATED LIQUID	3136	2	
TRICHLOROACETIC ACID	1839	8		2-TRIFLUOROMETHYLANILINE	2942	6.1	
TRICHLOROACETIC ACID SOLUTION	2564	8		3-TRIFLUOROMETHYLANILINE	2948	6.1	
Trichloroacetaldehyde, see	2075	6.1		TRIFLUOROMETHYL TETRAZOLE-SODIUM SALT IN ACETONE, with not less than 68 % acetone, by mass	3555	3	
				TRIISOBUTYLENE	2324	3	
				TRIISOPROPYL BORATE	2616	3	
				TRIMETHYLACETYL CHLORIDE	2438	6.1	
				TRIMETHYLAMINE, ANHYDROUS	1083	2	
				TRIMETHYLAMINE, AQUEOUS SOLUTION, not more than 50 % trimethylamine, by mass	1297	3	
				1,3,5-TRIMETHYLBENZENE	2325	3	
				TRIMETHYL BORATE	2416	3	

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TRIMETHYLCHLOROSILANE	1298	3		TRINITRORESORCINOL, dry or wetted with less than 20 % water, or mixture of alcohol and water, by mass	0219	1	
TRIMETHYLCYCLOHEXYLAMINE	2326	8		TRINITRORESORCINOL, WETTED with not less than 20 % water, or mixture of alcohol and water, by mass	0394	1	
Trimethylene chlorobromide, see	2688	6.1		TRINITROTOLUENE (TNT), dry or wetted with less than 30 % water, by mass	0209	1	
TRIMETHYLHEXAMETHYLENEDIAMINES	2327	8		TRINITROTOLUENE AND HEXANITROSTILBENE MIXTURE	0388	1	
TRIMETHYLHEXAMETHYLENE DIISOCYANATE	2328	6.1		TRINITROTOLUENE MIXTURE CONTAINING TRINITROBENZENE AND HEXANITROSTILBENE	0389	1	
2,4,4-Trimethylpentene-1, see	2050	3		TRINITROTOLUENE AND TRINITROBENZENE MIXTURE	0388	1	
2,4,4-Trimethylpentene-2, see	2050	3		TRINITROTOLUENE, WETTED with not less than 10 % water, by mass	3366	4.1	
TRIMETHYL PHOSPHITE	2329	3		TRINITROTOLUENE, WETTED with not less than 30 % water, by mass	1356	4.1	
TRINITROANILINE	0153	1		TRIPROPYLAMINE	2260	3	
TRINITROANISOLE	0213	1		TRIPROPYLENE	2057	3	
TRINITROBENZENE, dry or wetted with less than 30 % water, by mass	0214	1		TRIS-(1-AZIRIDINYL) PHOSPHINE OXIDE SOLUTION	2501	6.1	
TRINITROBENZENE, WETTED with not less than 10 % water, by mass	3367	4.1		TRITONAL	0390	1	
TRINITROBENZENE, WETTED with not less than 30 % water, by mass	1354	4.1		Tropilidene, see	2603	3	
TRINITROBENZENE-SULPHONIC ACID	0386	1		TUNGSTEN HEXAFLUORIDE	2196	2	
TRINITROBENZOIC ACID, dry or wetted with less than 30 % water, by mass	0215	1		TURPENTINE	1299	3	
TRINITROBENZOIC ACID, WETTED with not less than 10 % water, by mass	3368	4.1		TURPENTINE SUBSTITUTE	1300	3	
TRINITROBENZOIC ACID, WETTED with not less than 30 % water, by mass	1355	4.1		UNDECANE	2330	3	
TRINITROCHLOROBENZENE	0155	1		URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted	3507	6.1	
TRINITROCHLOROBENZENE WETTED with not less than 10 % water, by mass	3365	4.1		UREA HYDROGEN PEROXIDE	1511	5.1	
TRINITRO-m-CRESOL	0216	1		UREA NITRATE, dry or wetted with less than 20 % water, by mass	0220	1	
TRINITROFLUORENONE	0387	1		UREA NITRATE, WETTED with not less than 10 % water, by mass	3370	4.1	
TRINITRONAPHTHALENE	0217	1		UREA NITRATE, WETTED with not less than 20 % water, by mass	1357	4.1	
TRINITROPHENETOLE	0218	1		Valeral, see	2058	3	
TRINITROPHENOL, dry or wetted with less than 30 % water, by mass	0154	1		VALERALDEHYDE	2058	3	
TRINITROPHENOL (PICRIC ACID), WETTED with not less than 30 % water, by mass	1344	4.1		n-Valeraldehyde, see	2058	3	
TRINITROPHENOL WETTED with not less than 10 % water, by mass	3364	4.1					
TRINITROPHENYL-METHYLNITRAMINE	0208	1					



Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
Valeric aldehyde, see	2058	3		VINYLTRICHLOROSILANE	1305	3	
VALERYL CHLORIDE	2502	8		Warheads for guided missiles, see	0286	1	
VANADIUM COMPOUND, N.O.S.	3285	6.1			0287	1	
Vanadium (IV) oxide sulphate, see	2931	6.1			0369	1	
Vanadium oxysulphate, see	2931	6.1			0370	1	
VANADIUM OXYTRICHLORIDE	2443	8			0371	1	
VANADIUM PENTOXIDE, non-fused form	2862	6.1		WARHEADS, ROCKET with burster or expelling charge	0370	1	
VANADIUM TETRACHLORIDE	2444	8			0371	1	
VANADIUM TRICHLORIDE	2475	8		WARHEADS, ROCKET with bursting charge	0286	1	
VANADYL SULPHATE	2931	6.1			0287	1	
Varnish, see	1263	3			0369	1	
	3066	8		WARHEADS, TORPEDO with bursting charge	0221	1	
	3469	3		WATER-REACTIVE LIQUID, N.O.S.	3148	4.3	
	3470	8		WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.	3129	4.3	
VEHICLE, FLAMMABLE GAS POWERED	3166	9		WATER-REACTIVE LIQUID, TOXIC, N.O.S.	3130	4.3	
VEHICLE, FLAMMABLE LIQUID POWERED	3166	9		WATER-REACTIVE SOLID, N.O.S.	2813	4.3	
VEHICLE, FUEL CELL, FLAMMABLE GAS POWERED	3166	9		WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	3131	4.3	
VEHICLE, FUEL CELL, FLAMMABLE LIQUID POWERED	3166	9		WATER-REACTIVE SOLID, FLAMMABLE, N.O.S.	3132	4.3	
VEHICLE, LITHIUM ION BATTERY POWERED	3556	9		WATER-REACTIVE SOLID, OXIDIZING, N.O.S.	3133	4.3	Carriage prohibited
VEHICLE, LITHIUM METAL BATTERY POWERED	3557	9		WATER-REACTIVE SOLID, SELF-HEATING, N.O.S.	3135	4.3	
VEHICLE, SODIUM ION BATTERY POWERED	3558	9		WATER-REACTIVE SOLID, TOXIC, N.O.S.	3134	4.3	
Villiumite, see	1690	6.1		White arsenic, see	1561	6.1	
VINYL ACETATE, STABILIZED	1301	3		White spirit, see	1300	3	
Vinylbenzene, see	2055	3		WOOD PRESERVATIVES, LIQUID	1306	3	
VINYL BROMIDE, STABILIZED	1085	2		Wool waste, wet	1387	4.2	Not subject to ADR
VINYL BUTYRATE, STABILIZED	2838	3		XANTHATES	3342	4.2	
VINYL CHLORIDE, STABILIZED	1086	2		XENON	2036	2	
VINYL CHLOROACETATE	2589	6.1		XENON, REFRIGERATED LIQUID	2591	2	
VINYL ETHYL ETHER, STABILIZED	1302	3		XYLENES	1307	3	
VINYL FLUORIDE, STABILIZED	1860	2		XYLENOLS, LIQUID	3430	6.1	
VINYLDENE CHLORIDE, STABILIZED	1303	3		XYLENOLS, SOLID	2261	6.1	
VINYL ISOBUTYL ETHER, STABILIZED	1304	3		XYLIDINES, LIQUID	1711	6.1	
VINYL METHYL ETHER, STABILIZED	1087	2		XYLIDINES, SOLID	3452	6.1	
VINYLPYRIDINES, STABILIZED	3073	6.1		Xylols, see	1307	3	
VINYLTOLUENES, STABILIZED	2618	3		XYLYL BROMIDE, LIQUID	1701	6.1	
				XYLYL BROMIDE, SOLID	3417	6.1	
				ZINC AMMONIUM NITRITE	1512	5.1	

Name and description	UN No.	Class	Remarks	Name and description	UN No.	Class	Remarks
ZINC ARSENATE	1712	6.1		Zinc selenate, see	2630	4.1	
ZINC ARSENATE AND ZINC ARSENITE MIXTURE	1712	6.1		Zinc selenite, see	2630	4.1	
ZINC ARSENITE	1712	6.1		Zinc silicofluoride, see	2855	6.1	
ZINC ASHES	1435	4.3		ZIRCONIUM, DRY, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)	2858	4.1	
Zinc bisulphite solution, see	2693	8		ZIRCONIUM, DRY, finished sheets, strip or coiled wire	2009	4.2	
ZINC BROMATE	2469	5.1		ZIRCONIUM HYDRIDE	1437	4.1	
ZINC CHLORATE	1513	5.1		ZIRCONIUM NITRATE	2728	5.1	
ZINC CHLORIDE, ANHYDROUS	2331	8		ZIRCONIUM PICRAMATE, dry or wetted with less than 20 % water, by mass	0236	1	
ZINC CHLORIDE SOLUTION	1840	8		ZIRCONIUM PICRAMATE, WETTED with not less than 20 % water, by mass	1517	4.1	
ZINC CYANIDE	1713	6.1		ZIRCONIUM POWDER, DRY	2008	4.2	
ZINC DITHIONITE	1931	9		ZIRCONIUM POWDER, WETTED with not less than 25 % water	1358	4.1	
ZINC DUST	1436	4.3		ZIRCONIUM SCRAP	1932	4.2	
ZINC FLUOROSILICATE	2855	6.1		ZIRCONIUM SUSPENDED IN A FLAMMABLE LIQUID	1308	3	
Zinc hexafluorosilicate, see	2855	6.1		ZIRCONIUM TETRACHLORIDE	2503	8	
ZINC HYDROSULPHITE, see	1931	9					
ZINC NITRATE	1514	5.1					
ZINC PERMANGANATE	1515	5.1					
ZINC PEROXIDE	1516	5.1					
ZINC PHOSPHIDE	1714	4.3					
ZINC POWDER	1436	4.3					
ZINC RESINATE	2714	4.1					





### CHAPTER 3.3

#### SPECIAL PROVISIONS APPLICABLE TO CERTAIN ARTICLES OR SUBSTANCES

- 3.3.1 When column (6) of Table A of Chapter 3.2 indicates that a special provision is relevant to a substance or article, the meaning and requirements of that special provision are as set forth below. Where a special provision includes a requirement for package marking, the provisions of 5.2.1.2 (a) and (b) shall be met. If the required mark is in the form of specific wording indicated in quotation marks, such as "LITHIUM BATTERIES FOR DISPOSAL", the size of the mark shall be at least 12 mm, unless otherwise indicated in the special provision or elsewhere in ADR.
- 16 Samples of new or existing explosive substances or articles may be carried as directed by the competent authorities (see 2.2.1.1.3) for purposes including: testing, classification, research and development, quality control, or as a commercial sample. Explosive samples which are not wetted or desensitized shall be limited to 10 kg in small packages as specified by the competent authorities. Explosive samples which are wetted or desensitized shall be limited to 25 kg.
- 23 Even though this substance has a flammability hazard, it only exhibits such hazard under extreme fire conditions in confined areas.
- 28 This substance may be carried under the provisions of Class 3 or Class 4.1 only if it is so packed that the percentage of diluent will not fall below that stated, at any time during carriage (see 2.2.3.1.1 and 2.2.41.1.18). In cases where the diluent is not stated, the substance shall be packed so that the amount of explosive substance does not exceed the stated value.
- 32 This substance is not subject to the requirements of ADR when in any other form.
- 37 This substance is not subject to the requirements of ADR when coated.
- 38 This substance is not subject to the requirements of ADR when it contains not more than 0.1 % calcium carbide.
- 39 This substance is not subject to the requirements of ADR when it contains less than 30 % or not less than 90 % silicon.
- 43 When offered for carriage as pesticides, these substances shall be carried under the relevant pesticide entry and in accordance with the relevant pesticide provisions (see 2.2.61.1.10 to 2.2.61.1.11.2).
- 45 Antimony sulphides and oxides which contain not more than 0.5 % of arsenic calculated on the total mass are not subject to the requirements of ADR.
- 47 Ferricyanides and ferrocyanides are not subject to the requirements of ADR.
- 48 The carriage of this substance, when it contains more than 20 % hydrocyanic acid, is prohibited.
- 59 These substances are not subject to the requirements of ADR when they contain not more than 50 % magnesium.
- 60 If the concentration is more than 72 %, the carriage of this substance is prohibited.
- 61 The technical name which shall supplement the proper shipping name shall be the ISO common name (see also ISO 1750:1981 "*Pesticides and other agrochemicals - common names*", as amended), other name listed in the WHO "*Recommended Classification of Pesticides by Hazard and Guidelines to Classification*" or the name of the active substance (see also 3.1.2.8.1 and 3.1.2.8.1.1).
- 62 This substance is not subject to the requirements of ADR when it contains not more than 4 % sodium hydroxide.
- 65 Hydrogen peroxide aqueous solutions with less than 8 % hydrogen peroxide are not subject to the requirements of ADR.

- 66 Cinnabar is not subject to the requirements of ADR.
- 103 The carriage of ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt is prohibited.
- 105 Nitrocellulose meeting the descriptions of UN No. 2556 or UN No. 2557 may be classified in Class 4.1.
- 113 The carriage of chemically unstable mixtures is prohibited.
- 119 Refrigerating machines include machines or other appliances which have been designed for the specific purpose of keeping food or other items at a low temperature in an internal compartment, and air conditioning units. Refrigerating machines and refrigerating machine components are not subject to the provisions of ADR if they contain less than 12 kg of gas in Class 2, group A or O according to 2.2.2.1.3, or if they contain less than 12 litres ammonia solution (UN No. 2672).
- NOTE: For the purposes of carriage, heat pumps may be considered as refrigerating machines.*
- 122 The subsidiary hazards, control and emergency temperatures if any, and the UN number (generic entry) for each of the currently assigned organic peroxide formulations are given in 2.2.52.4, 4.1.4.2 packing instruction IBC520 and 4.2.5.2.6 portable tank instruction T23.
- 123 *(Reserved)*
- 127 Other inert material or inert material mixture may be used, provided this inert material has identical phlegmatizing properties.
- 131 The phlegmatized substance shall be significantly less sensitive than dry PETN.
- 135 The dihydrated sodium salt of dichloroisocyanuric acid does not meet the criteria for inclusion in Class 5.1 and is not subject to ADR unless meeting the criteria for inclusion in another Class.
- 138 p-Bromobenzyl cyanide is not subject to the requirements of ADR.
- 141 Products which have undergone sufficient heat treatment so that they present no hazard during carriage are not subject to the requirements of ADR.
- 142 Solvent extracted soya bean meal containing not more than 1.5 % oil and 11 % moisture, which is substantially free of flammable solvent, is not subject to the requirements of ADR.
- 144 An aqueous solution containing not more than 24 % alcohol by volume is not subject to the requirements of ADR.
- 145 Alcoholic beverages of packing group III, when carried in receptacles of 250 litres or less, are not subject to the requirements of ADR.
- 152 The classification of this substance will vary with particle size and packaging, but borderlines have not been experimentally determined. Appropriate classifications shall be made in accordance with 2.2.1.
- 153 This entry applies only if it is demonstrated, on the basis of tests, that the substances when in contact with water are not combustible nor show a tendency to auto-ignition and that the mixture of gases evolved is not flammable.
- 162 *(Deleted)*
- 163 A substance mentioned by name in Table A of Chapter 3.2 shall not be carried under this entry. Substances carried under this entry may contain 20 % or less nitrocellulose provided the nitrocellulose contains not more than 12.6 % nitrogen (by dry mass).
- 168 Asbestos which is immersed or fixed in a natural or artificial binder (such as cement, plastics, asphalt, resins or mineral ore) in such a way that no escape of hazardous quantities of respirable asbestos fibres can occur during carriage is not subject to the requirements of ADR. Manufactured articles containing asbestos and not meeting this provision are nevertheless not

subject to the requirements of ADR when packed so that no escape of hazardous quantities of respirable asbestos fibres can occur during carriage.

- 169 Phthalic anhydride in the solid state and tetrahydrophthalic anhydrides, with not more than 0.05 % maleic anhydride, are not subject to the requirements of ADR. Phthalic anhydride molten at a temperature above its flash-point, with not more than 0.05 % maleic anhydride, shall be classified under UN No. 3256.
- 172 Where a radioactive material has (a) subsidiary hazard(s):
- (a) The substance shall be allocated to packing group I, II or III, if appropriate, by application of the packing group criteria provided in Part 2 corresponding to the nature of the predominant subsidiary hazard;
  - (b) Packages shall be labelled with subsidiary hazard labels corresponding to each subsidiary risk exhibited by the material; corresponding placards shall be affixed to cargo transport units in accordance with the relevant provisions of 5.3.1;
  - (c) For the purposes of documentation and package marking, the proper shipping name shall be supplemented with the name of the constituents which most predominantly contribute to this (these) subsidiary hazard(s) and which shall be enclosed in parenthesis;
  - (d) The dangerous goods transport document shall indicate the label model number(s) corresponding to each subsidiary hazard in parenthesis after the Class number "7" and, where assigned the packing group as required by 5.4.1.1.1 (d).

For packing, see also 4.1.9.1.5.

- 177 Barium sulphate is not subject to the requirements of ADR.
- 178 This designation shall be used only when no other appropriate designation exists in Table A of Chapter 3.2, and only with the approval of the competent authority of the country of origin (see 2.2.1.1.3).
- 181 Packages containing this type of substance shall bear a label conforming to model No. 1 (see 5.2.2.2.2) unless the competent authority of the country of origin has permitted this label to be dispensed with for the specific packaging employed because test data have proved that the substance in this packaging does not exhibit explosive behaviour (see 5.2.2.1.9).
- 182 The group of alkali metals includes lithium, sodium, potassium, rubidium and caesium.
- 183 The group of alkaline earth metals includes magnesium, calcium, strontium and barium.
- 186 *(Deleted)*
- 188 Cells and batteries offered for carriage are not subject to other provisions of ADR if they meet the following:
- (a) For a lithium metal or lithium alloy cell, the lithium content is not more than 1 g, and for a lithium ion or sodium ion cell, the watt-hour rating is not more than 20 Wh;

*NOTE: When lithium batteries in conformity with 2.2.9.1.7.1 (f) are carried in accordance with this special provision, the total lithium content of all lithium metal cells contained in the battery shall not exceed 1.5 g and the total capacity of all lithium ion cells contained in the battery shall not exceed 10 Wh (see special provision 387).*

- (b) For a lithium metal or lithium alloy battery the aggregate lithium content is not more than 2 g, and for a lithium ion or sodium ion battery, the watt-hour rating is not more than 100 Wh. Lithium ion and sodium ion batteries subject to this provision shall be marked with the watt-hour rating on the outside case, except lithium ion batteries manufactured before 1 January 2009;

*NOTE: When lithium batteries in conformity with 2.2.9.1.7.1 (f) are carried in accordance with this special provision, the total lithium content of all lithium metal cells*



*contained in the battery shall not exceed 1.5 g and the total capacity of all lithium ion cells contained in the battery shall not exceed 10 Wh (see special provision 387).*

- (c) Each lithium cell or battery meets the provisions of 2.2.9.1.7.1 (a), (e), (f) if applicable and (g) or for sodium ion cells or batteries, the provisions of 2.2.9.1.7.2 (a), (e) and (f) shall apply;
- (d) Cells and batteries, except when installed in equipment, shall be packed in inner packagings that completely enclose the cell or battery. Cells and batteries shall be protected so as to prevent short circuits. This includes protection against contact with electrically conductive material within the same packaging that could lead to a short circuit. The inner packagings shall be packed in strong outer packagings which conform to the provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.5;
- (e) Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with an effective means of preventing accidental activation. This requirement does not apply to devices which are intentionally active in carriage (radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating a dangerous evolution of heat. When batteries are installed in equipment, the equipment shall be packed in strong outer packagings constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use unless the battery is afforded equivalent protection by the equipment in which it is contained;
- (f) Each package shall be marked with the appropriate battery mark, as illustrated in 5.2.1.9;  
This requirement does not apply to:
  - (i) Packages containing only button cell batteries installed in equipment (including circuit boards); and
  - (ii) Packages containing no more than four cells or two batteries installed in equipment, where there are not more than two packages in the consignment;

When packages are placed in an overpack, the 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.

***NOTE:** Packages containing lithium batteries packed in conformity with the provisions of Part 4, Chapter 11, packing instructions 965 or 968, Section IB of the ICAO Technical Instructions that bear the mark as shown in 5.2.1.9 (battery mark) and the label shown in 5.2.2.2.2, model No. 9A shall be deemed to meet the provisions of this special provision.*

- (g) Except when cells or batteries are installed in equipment, each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents; and
- (h) Except when cells or batteries are installed in or packed with equipment, packages shall not exceed 30 kg gross mass.

As used above and elsewhere in ADR, "lithium content" means the mass of lithium in the anode of a lithium metal or lithium alloy cell. As used in this special provision "equipment" means apparatus for which the cells or batteries will provide electrical power for its operation.

Separate entries exist for lithium metal batteries and lithium ion batteries to facilitate the carriage of these batteries for specific modes of carriage and to enable the application of different emergency response actions.

A single cell battery as defined in Part III, sub-section 38.3.2.3 of the *Manual of Tests and Criteria* is considered a "cell" and shall be carried according to the requirements for "cells" for the purpose of this special provision.

- 190 Aerosol dispensers shall be provided with protection against inadvertent discharge. Aerosols with a capacity not exceeding 50 ml containing only non-toxic constituents are not subject to the requirements of ADR.
- 191 Receptacles, small, with a capacity not exceeding 50 ml, containing only non-toxic constituents are not subject to the requirements of ADR.
- 193 This entry may only be used for ammonium nitrate based compound fertilizers. They shall be classified in accordance with the procedure as set out in the *Manual of Tests and Criteria*, Part III, Section 39. Fertilizers meeting the criteria for this UN number are not subject to the requirements of ADR.
- 194 The control and emergency temperatures, if any, and the UN number (generic entry) for each of the currently assigned self-reactive substances are given in 2.2.41.4.
- 196 Formulations which in laboratory testing neither detonate in the cavitated state nor deflagrate, which show no effect when heated under confinement and which exhibit no explosive power may be carried under this entry. The formulation must also be thermally stable (i.e. the SADT is 60 °C or higher for a 50 kg package). Formulations not meeting these criteria shall be carried under the provisions of Class 5.2, (see 2.2.52.4).
- 198 Nitrocellulose solutions containing not more than 20 % nitrocellulose may be carried as paint, perfumery products or printing ink, as applicable (see UN Nos. 1210, 1263, 1266, 3066, 3469 and 3470).
- 199 Lead compounds which, when mixed in a ratio of 1:1000 with 0.07M hydrochloric acid and stirred for one hour at a temperature of 23 °C ± 2 °C, exhibit a solubility of 5 % or less (see ISO 3711:1990 *"Lead chromate pigments and lead chromate -molybdate pigments – Specifications and methods of test"*) are considered insoluble and are not subject to the requirements of ADR unless they meet the criteria for inclusion in another class.
- 201 Lighters and lighter refills shall comply with the provisions of the country in which they were filled. They shall be provided with protection against inadvertent discharge. The liquid portion of the gas shall not exceed 85 % of the capacity of the receptacle at 15 °C. The receptacles, including the closures, shall be capable of withstanding an internal pressure of twice the pressure of the liquefied petroleum gas at 55 °C. The valve mechanisms and ignition devices shall be securely sealed, taped or otherwise fastened or designed to prevent operation or leakage of the contents during carriage. Lighters shall not contain more than 10 g of liquefied petroleum gas. Lighter refills shall not contain more than 65 g of liquefied petroleum gas.
- NOTE: For waste lighters collected separately see Chapter 3.3, special provision 654.*
- 203 This entry shall not be used for polychlorinated biphenyls, liquid, UN No. 2315 and polychlorinated biphenyls, solid, UN No.3432.
- 204 *(Deleted)*
- 205 This entry shall not be used for UN No. 3155 PENTACHLOROPHENOL.
- 207 Plastics moulding compounds may be made from polystyrene, poly(methyl methacrylate) or other polymeric material.
- 208 The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 % ammonium nitrate and at least 12 % water of crystallization, is not subject to the requirements of ADR.
- 210 Toxins from plant, animal or bacterial sources which contain infectious substances, or toxins that are contained in infectious substances, shall be classified in Class 6.2.
- 215 This entry only applies to the technically pure substance or to 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 2.2.41.4). Homogeneous mixtures containing not more than 35 % by mass of azodicarbonamide and at least 65 % of inert substance are not subject to the requirements of ADR unless criteria of other classes are met.



- 216 Mixtures of solids which are not subject to the requirements of ADR and flammable liquids may be carried under this entry without first applying the classification criteria of Class 4.1, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging or cargo transport unit is closed. Sealed packets and articles containing less than 10 ml of a packing group II or III flammable liquid absorbed into a solid material are not subject to ADR provided there is no free liquid in the packet or article.
- 217 Mixtures of solids which are not subject to the requirements of ADR and toxic liquids may be carried under this entry without first applying the classification criteria of Class 6.1, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging or cargo transport unit is closed. This entry shall not be used for solids containing a packing group I liquid.
- 218 Mixtures of solids which are not subject to the requirements of ADR and corrosive liquids may be carried under this entry without first applying the classification criteria of Class 8, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging or cargo transport unit is closed.
- 219 Genetically modified microorganisms (GMMOs) and genetically modified organisms (GMOs) packed and marked in accordance with packing instruction P904 of 4.1.4.1 are not subject to any other requirements of ADR.
- If GMMOs or GMOs meet the criteria for inclusion in Class 6.1 or 6.2 (see 2.2.61.1 and 2.2.62.1) the requirements in ADR for the carriage of toxic substances or infectious substances apply.
- 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.
- 221 Substances included under this entry shall not be of packing group I.
- 224 Unless it can be demonstrated by testing that the sensitivity of the substance in its frozen state is no greater than in its liquid state, the substance shall remain liquid during normal transport conditions. It shall not freeze at temperatures above -15 °C.
- 225 Fire extinguishers under this entry may include installed actuating cartridges (cartridges, power device of classification code 1.4C or 1.4S), without changing the classification of Class 2, group A or O according to 2.2.2.1.3 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per extinguishing unit. Fire extinguishers shall be manufactured, tested, approved and labelled according to the provisions applied in the country of manufacture.

**NOTE:** "Provisions applied in the country of manufacture" means the provisions applicable in the country of manufacture or those applicable in the country of use.

Fire extinguishers under this entry include:

- (a) Portable fire extinguishers for manual handling and operation;

**NOTE:** This entry applies to portable fire extinguishers, even if some components that are necessary for their proper functioning (e.g. hoses and nozzles) are temporarily detached, as long as the safety of the pressurized extinguishing agent containers is not compromised and the fire extinguishers continue to be identified as a portable fire extinguisher.

- (b) Fire extinguishers for installation in aircraft;
- (c) Fire extinguishers mounted on wheels for manual handling;
- (d) Fire extinguishing equipment or machinery mounted on wheels or wheeled platforms or units carried similar to (small) trailers, and
- (e) Fire extinguishers composed of a non-rollable pressure drum and equipment, and handled e.g. by fork lift or crane when loaded or unloaded.

**NOTE:** Pressure receptacles which contain gases for use in the above-mentioned fire extinguishers or for use in stationary fire-fighting installations shall meet the requirements of



*Chapter 6.2 and all requirements applicable to the relevant dangerous goods when these pressure receptacles are carried separately.*

- 226 Formulations of this substance containing not less than 30 % non-volatile, non-flammable phlegmatizer are not subject to the requirements of ADR.
- 227 When phlegmatized with water and inorganic inert material the content of urea nitrate may not exceed 75 % by mass and the mixture shall not be capable of being detonated by the Series 1, type (a), test in the *Manual of Tests and Criteria*, Part 1.
- 228 Mixtures not meeting the criteria for flammable gases (see 2.2.2.1.5) shall be carried under UN No. 3163.
- 230 Lithium cells and batteries may be carried under this entry if they meet the provisions of 2.2.9.1.7.1. Sodium ion cells and batteries may be carried under this entry if they meet the provisions of 2.2.9.1.7.2.
- 235 This entry applies to articles which contain Class 1 explosive substances and which may also contain dangerous goods of other classes. These articles are used to enhance safety in vehicles, vessels or aircraft – e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices.
- 236 Polyester resin kits consist of two components: a base material (either Class 3 or Class 4.1, packing group II or III) and an activator (organic peroxide). The organic peroxide shall be type D, E, or F, not requiring temperature control. The packing group shall be II or III, according to the criteria of either Class 3 or Class 4.1, as appropriate, applied to the base material. The quantity limit shown in column (7a) of Table A of Chapter 3.2 applies to the base material.
- 237 The membrane filters, including paper separators, coating or backing materials, etc., that are present in carriage, shall not be liable to propagate a detonation as tested by one of the tests described in the *Manual of Tests and Criteria*, Part I, test series 1 (a).

In addition the competent authority may determine, on the basis of the results of suitable burning rate tests taking account of the standard tests in the *Manual of Tests and Criteria*, Part III, sub-section 33.2, that nitrocellulose membrane filters in the form in which they are to be carried are not subject to the requirements applicable to flammable solids in Class 4.1.

- 238 (a) Batteries can be considered as non-spillable provided that they are capable of withstanding the vibration and pressure differential tests given below, without leakage of battery fluid.

**Vibration test:** The battery is rigidly clamped to the platform of a vibration machine and a simple harmonic motion having an amplitude of 0.8 mm (1.6 mm maximum total excursion) is applied. The frequency is varied at the rate of 1 Hz/min between the limits of 10 Hz and 55 Hz. The entire range of frequencies and return is traversed in  $95 \pm 5$  minutes for each mounting position (direction of vibration) of the battery. The battery is tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for equal time periods.

**Pressure differential test:** Following the vibration test, the battery is stored for six hours at  $24\text{ }^{\circ}\text{C} \pm 4\text{ }^{\circ}\text{C}$  while subjected to a pressure differential of at least 88 kPa. The battery is tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for at least six hours in each position.

- (b) Non-spillable batteries are not subject to the requirements of ADR if, at a temperature of  $55\text{ }^{\circ}\text{C}$ , the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow and if, as packaged for carriage, the terminals are protected from short circuit.
- 239 Batteries or cells shall not contain dangerous substances other than sodium, sulphur or sodium compounds (e.g. sodium polysulphides and sodium tetrachloroaluminate). Batteries or cells shall not be offered for carriage at a temperature such that liquid elemental sodium is present in the battery or cell unless approved and under the conditions established by the competent authority of the country of origin. If the country of origin is not a Contracting Party to ADR, the approval

and conditions of carriage shall be recognized by the competent authority of the first country Contracting Party to ADR reached by the consignment.

Cells shall consist of hermetically sealed metal casings which fully enclose the dangerous substances and which are so constructed and closed as to prevent the release of the dangerous substances under normal conditions of carriage.

Batteries shall consist of cells secured within and fully enclosed by a metal casing so constructed and closed as to prevent the release of the dangerous substances under normal conditions of carriage.

240 (Deleted)

241 The formulation shall be prepared so that it remains homogeneous and does not separate during carriage. Formulations with low nitrocellulose contents and not showing dangerous properties 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 *Manual of Tests and Criteria*, Part I and not being a flammable solid when tested in accordance with test N.1 in the *Manual of Tests and Criteria*, Part III, sub-section 33.2.4 (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm) are not subject to the requirements of ADR.

242 Sulphur is not subject to the requirements of ADR when it has been formed to a specific shape (e.g. prills, granules, pellets, pastilles or flakes).

243 Gasoline, motor spirit and petrol for use in spark-ignition engines (e.g. in automobiles, stationary engines and other engines) shall be assigned to this entry regardless of variations in volatility.

244 This entry includes e.g. aluminium dross, aluminium skimmings, spent cathodes, spent potliner, and aluminium salt slags.

247 Alcoholic beverages containing more than 24 % alcohol but not more than 70 % by volume, when carried as part of the manufacturing process, may be carried in wooden barrels with a capacity of more than 250 litres and not more than 500 litres meeting the general requirements of 4.1.1, as appropriate, on the following conditions:

- (a) The wooden barrels shall be checked and tightened before filling;
- (b) Sufficient ullage (not less than 3 %) shall be left to allow for the expansion of the liquid;
- (c) The wooden barrels shall be carried with the bungholes pointing upwards;
- (d) The wooden barrels shall be carried in containers meeting the requirements of the CSC. Each wooden barrel shall be secured in custom-made cradles and be wedged by appropriate means to prevent it from being displaced in any way during carriage.

249 Ferrocenium, stabilized against corrosion, with a minimum iron content of 10 % is not subject to the requirements of ADR.

250 This entry may only be used for samples of chemicals taken for analysis in connection with the implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. The carriage of substances under this entry shall be in accordance with the chain of custody and security procedures specified by the Organisation for the Prohibition of Chemical Weapons.

The chemical sample may only be carried providing prior approval has been granted by the competent authority or the Director General of the Organisation for the Prohibition of Chemical Weapons and providing the sample complies with the following provisions:

- (a) It shall be packed according to packing instruction 623 in the ICAO Technical Instructions; and
- (b) During carriage, a copy of the document of approval for transport, showing the quantity limitations and the packing provisions shall be attached to the transport document.



251 The entry CHEMICAL KIT or FIRST AID KIT is intended to apply to boxes, cases etc. containing small quantities of various dangerous goods which are used for example for medical, analytical or testing or repair purposes. Such kits shall only contain dangerous goods that are permitted as:

- (a) Excepted quantities not exceeding the quantity indicated by the code in column (7b) of Table A of Chapter 3.2, provided that the net quantity per inner packaging and net quantity per package are as prescribed in 3.5.1.2 and 3.5.1.3; or
- (b) Limited quantities as indicated in column (7a) of Table A of Chapter 3.2, provided that the net quantity per inner packaging does not exceed 250 ml or 250 g.

Components shall not react dangerously (see "dangerous reaction" in 1.2.1). The total quantity of dangerous goods in any one kit shall not exceed either 1 l or 1 kg.

For the purposes of completion of the transport document as set out in 5.4.1.1.1, the packing group shown on the document shall be the most stringent packing group assigned to any individual substance in the kit. Where the kit contains only dangerous goods to which no packing group is assigned, no packing group need be indicated on the dangerous goods transport document.

Kits which are carried on board vehicles for first-aid or operating purposes are not subject to the requirements of ADR.

Chemical kits and first aid kits containing dangerous goods in inner packagings which do not exceed the quantity limits for limited quantities applicable to individual substances as specified in column (7a) of Table A of Chapter 3.2 may be carried in accordance with Chapter 3.4.

252 (1) Ammonium nitrate hot concentrated solutions can be carried under this entry provided:

- (a) The solution contains not more than 93 % ammonium nitrate;
- (b) The solution contains at least 7 % water;
- (c) The solution contains not more than 0.2 % combustible material;
- (d) The solution contains no chlorine compounds in quantities such that the chloride ion level exceeds 0.02 %;
- (e) The pH of an aqueous solution of 10 % of the substance is between 5 and 7, measured at 25 °C; and
- (f) The maximum allowable carriage temperature of the solution is 140 °C.

(2) Additionally, ammonium nitrate hot concentrate solutions are not subject to ADR provided:

- (a) The solution contains not more than 80 % ammonium nitrate;
- (b) The solution contains not more than 0.2 % combustible material;
- (c) The ammonium nitrate remains in solution under all conditions of carriage; and
- (d) The solution does not meet the criteria of any other class.

266 This substance, when containing less alcohol, water or phlegmatizer than specified, shall not be carried unless specifically authorized by the competent authority (see 2.2.1.1).

267 Any explosives, blasting, type C containing chlorates shall be segregated from explosives containing ammonium nitrate or other ammonium salts.

270 Aqueous solutions of Class 5.1 inorganic solid nitrate substances are considered as not meeting the criteria of Class 5.1 if the concentration of the substances in solution at the minimum temperature encountered during carriage is not greater than 80 % of the saturation limit.

271 Lactose or glucose or similar materials, may be used as a phlegmatizer provided that the substance contains not less than 90 %, by mass, of phlegmatizer. The competent authority may authorize these mixtures to be classified in Class 4.1 on the basis of a test series 6(c) of Section 16 of Part I of the *Manual of Tests and Criteria* on at least three packages as prepared for



carriage. Mixtures containing at least 98 %, by mass, of phlegmatizer are not subject to the requirements of ADR. Packages containing mixtures with not less than 90 %, by mass, of phlegmatizer need not bear a label conforming to model No. 6.1.

- 272 This substance shall not be carried under the provisions of Class 4.1 unless specifically authorized by the competent authority (see UN No. 0143 or UN No. 0150 as appropriate).
- 273 Maneb and maneb preparations stabilized against self-heating need not be classified in Class 4.2 when it can be demonstrated by testing that a cubic volume of 1 m<sup>3</sup> of substance does not self-ignite and that the temperature at the centre of the sample does not exceed 200 °C, when the sample is maintained at a temperature of not less than 75 °C ± 2 °C for a period of 24 hours.
- 274 The provisions of 3.1.2.8 apply.
- 278 These substances shall not be classified and carried unless authorized by the competent authority on the basis of results from Series 2 tests and a Series 6(c) test of Part I of the *Manual of Tests and Criteria* on packages as prepared for carriage (see 2.2.1.1). The competent authority shall assign the packing group on the basis of 2.2.3 criteria and the package type used for the Series 6(c) test.
- 279 The substance is assigned to this classification or packing group based on human experience rather than the strict application of classification criteria set out in ADR.
- 280 This entry applies to safety devices for vehicles, vessels or aircraft, e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices, which contain dangerous goods of Class 1 or of other classes, when carried as component parts and if these articles as presented for carriage have been tested in accordance with test series 6(c) of Part I of the *Manual of Tests and Criteria*, with no explosion of the device, no fragmentation of device casing or pressure receptacle, and no projection hazard nor thermal effect which would significantly hinder fire-fighting or emergency response efforts in the immediate vicinity. This entry does not apply to life saving appliances described in special provision 296 (UN Nos. 2990 and 3072) or to fire suppressant dispersing devices described in special provision 407 (UN Nos. 0514 and 3559).
- 282 *(Deleted)*
- 283 Articles, containing gas, intended to function as shock absorbers, including impact energy-absorbing devices, or pneumatic springs are not subject to the requirements of ADR provided:
- (a) Each article has a gas space capacity not exceeding 1.6 litres and a charge pressure not exceeding 280 bar where the product of the capacity (litres) and charge pressure (bars) does not exceed 80 (i.e. 0.5 litres gas space and 160 bar charge pressure, 1 litre gas space and 80 bar charge pressure, 1.6 litres gas space and 50 bar charge pressure, 0.28 litres 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 litres gas space capacity and 5 times charge pressure for products greater than 0.5 litres 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 competent authority; and
  - (e) The design type has been subjected to a fire test demonstrating that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, such that the article will not fragment and that the article does not rocket.

See also 1.1.3.2 (d) for equipment used for the operation of the vehicle.

- 284 An oxygen generator, chemical, containing oxidizing substances shall meet the following conditions:
- (a) The generator when containing an explosive actuating device shall only be carried under this entry when excluded from Class 1 in accordance with the note under paragraph 2.2.1.1.1 (b);

- (b) The generator, without its packaging, shall be capable of withstanding a 1.8 m drop test onto a rigid, non-resilient, flat and horizontal surface, in the position most likely to cause damage, without loss of its contents and without actuation;
  - (c) When a generator is equipped with an actuating device, it shall have at least two positive means of preventing unintentional actuation.
- 286 Nitrocellulose membrane filters covered by this entry, each with a mass not exceeding 0.5 g, are not subject to the requirements of ADR when contained individually in an article or a sealed packet.
- 288 These substances shall not be classified and carried unless authorized by the competent authority on the basis of results from Series 2 tests and a Series 6(c) test of Part I of the *Manual of tests and Criteria* on packages as prepared for carriage (see 2.2.1.1).
- 289 Safety devices, electrically initiated and safety devices, pyrotechnic installed in vehicles, wagons, vessels or aircraft or in completed components such as steering columns, door panels, seats, etc. are not subject to ADR.
- 290 When this radioactive material meets the definitions and criteria of other classes as defined in Part 2, it shall be classified in accordance with the following:
- (a) Where the substance meets the criteria for dangerous goods in excepted quantities as set out in Chapter 3.5, the packagings shall be in accordance with 3.5.2 and meet the testing requirements of 3.5.3. All other requirements applicable to radioactive material, excepted packages as set out in 1.7.1.5 shall apply without reference to the other class;
  - (b) Where the quantity exceeds the limits specified in 3.5.1.2 the substance shall be classified in accordance with the predominant subsidiary hazard. The transport document shall describe the substance with the UN number and proper shipping name applicable to the other class supplemented with the name applicable to the radioactive excepted package according to column (2) of Table A of Chapter 3.2, and the substance shall be carried in accordance with the provisions applicable to that UN number. An example of the information shown on the transport document is:  
  
"UN 1993, Flammable liquid, n.o.s. (ethanol and toluene mixture), Radioactive material, excepted package – limited quantity of material, 3, PG II".  
  
In addition, the requirements of 2.2.7.2.4.1 shall apply;
  - (c) The provisions of Chapter 3.4 for the carriage of dangerous goods packed in limited quantities shall not apply to substances classified in accordance with sub-paragraph (b);
  - (d) When the substance meets a special provision that exempts this substance from all dangerous goods provisions of the other classes it shall be classified in accordance with the applicable UN number of Class 7 and all requirements specified in 1.7.1.5 shall apply.
- 291 Flammable liquefied gases shall be contained within refrigerating machine components. These components shall be designed and tested to at least three times the working pressure of the machinery. The refrigerating machines shall be designed and constructed to contain the liquefied gas and preclude the risk of bursting or cracking of the pressure retaining components during normal conditions of carriage. Refrigerating machines and refrigerating-machine components are not subject to the requirements of ADR if they contain less than 12 kg of gas.
- NOTE: For the purposes of carriage, heat pumps may be considered as refrigerating machines.*
- 292 *(Deleted)*
- 293 The following definitions apply to matches:
- (a) Fusee matches are matches the heads of which are prepared with a friction-sensitive igniter composition and a pyrotechnic composition which burns with little or no flame, but with intense heat;
  - (b) Safety matches are matches that are combined with or attached to the box, book or card that can be ignited by friction only on a prepared surface;



- (c) Strike anywhere matches are matches that can be ignited by friction on a solid surface;
  - (d) Wax Vesta matches are matches that can be ignited by friction either on a prepared surface or on a solid surface.
- 295 Batteries need not be individually marked and labelled if the pallet bears the appropriate mark and label.
- 296 These entries apply to life-saving appliances such as life rafts, personal flotation devices and self-inflating slides. UN No. 2990 applies to self-inflating appliances and UN No. 3072 applies to life-saving appliances that are not self-inflating. Life-saving appliances may contain:
- (a) Signal devices (Class 1) which may include smoke and illumination signal flares packed in packagings that prevent them from being inadvertently activated;
  - (b) For UN No. 2990 only, cartridges, power device of Division 1.4, compatibility group S, may be contained for purposes of the self-inflating mechanism and provided that the quantity of explosives per appliance does not exceed 3.2 g;
  - (c) Class 2 compressed or liquefied gases, group A or O, according to 2.2.2.1.3;
  - (d) Electric storage batteries (Class 8) and lithium batteries or sodium ion batteries (Class 9);
  - (e) First aid kits or repair kits containing small quantities of dangerous goods (e.g.: substances of Class 3, 4.1, 5.2, 8 or 9); or
  - (f) "Strike anywhere" matches packed in packagings that prevent them from being inadvertently activated.
- Life-saving appliances packed in strong rigid outer packagings with a total maximum gross mass of 40 kg, containing no dangerous goods other than compressed or liquefied gases of Class 2, group A or group O, in receptacles with a capacity not exceeding 120 ml, installed solely for the purpose of the activation of the appliance, are not subject to the requirements of ADR.
- 298 *(Deleted)*
- 300 Fish meal, fish scrap and krill meal shall not be loaded if the temperature at the time of loading exceeds 35 °C or 5 °C above the ambient temperature whichever is higher.
- 301 This entry only applies to articles such as machinery, apparatus or devices containing dangerous goods as a residue or an integral element of the articles. It shall not be used for articles for which a proper shipping name already exists in Table A of Chapter 3.2. Articles carried under this entry shall only contain dangerous goods which are authorized to be carried in accordance with the provisions of Chapter 3.4 (Limited quantities). The quantity of dangerous goods in articles shall not exceed the quantity specified in column (7a) of Table A of Chapter 3.2 for each item of dangerous goods contained. If the articles contain more than one item of dangerous goods, the individual dangerous goods shall be enclosed to prevent them reacting dangerously with one another during carriage (see 4.1.1.6). When it is required to ensure liquid dangerous goods remain in their intended orientation, orientation arrows shall be displayed on at least two opposite vertical sides with the arrows pointing in the correct direction in accordance with 5.2.1.10.
- 302 Fumigated cargo transport units containing no other dangerous goods are only subject to the provisions of 5.5.2.
- 303 Receptacles shall be assigned to the classification code of the gas or mixture of gases contained therein determined in accordance with the provisions of section 2.2.2.
- 304 This entry may only be used for the transport of non-activated batteries which contain dry potassium hydroxide and which are intended to be activated prior to use by addition of an appropriate amount of water to the individual cells.
- 305 These substances are not subject to the requirements of ADR when in concentrations of not more than 50 mg/kg.
- 306 This entry may only be used for substances that are too insensitive for acceptance into Class 1 when tested in accordance with test series 2 (see *Manual of Tests and Criteria*, Part I).



307 This entry may only be used for ammonium nitrate based fertilizers. They shall be classified in accordance with the procedure as set out in the *Manual of Tests and Criteria*, Part III, Section 39 subject to the restrictions of 2.2.51.2.2, thirteenth and fourteenth indents. When used in the said Section 39, the term "competent authority" means the competent authority of the country of origin. If the country of origin is not a Contracting Party to ADR, the classification and conditions of carriage shall be recognized by the competent authority of the first country Contracting Party to ADR reached by the consignment.

309 This entry applies to non sensitized emulsions, suspensions and gels consisting primarily of a mixture of ammonium nitrate and fuel, intended to produce a Type E blasting explosive only after further processing prior to use.

The mixture for emulsions typically has the following composition: 60-85 % ammonium nitrate, 5-30 % water, 2-8 % fuel, 0.5-4 % emulsifier agent, 0-10 % soluble flame suppressants, and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate.

The mixture for suspensions and gels typically has the following composition: 60-85 % ammonium nitrate, 0-5 % sodium or potassium perchlorate, 0-17 % hexamine nitrate or monomethylamine nitrate, 5-30 % water, 2-15 % fuel, 0.5-4 % thickening agent, 0-10 % soluble flame suppressants, and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate.

Substances shall satisfy the criteria for classification as an ammonium nitrate emulsion, suspension or gel, intermediate for blasting explosives (ANE) of test series 8 of the *Manual of Tests and Criteria*, Part I, Section 18 and be approved by the competent authority.

310 Cells or batteries from production runs of not more than 100 cells or batteries, or pre-production prototypes of cells or batteries when these prototypes are carried for testing, shall meet the provisions of 2.2.9.1.7.1 with the exception of (a), (e) (vii), (f) (iii) if applicable, (f) (iv) if applicable and (g).

**NOTE:** "Carried for testing" includes, but is not limited to, testing described in the "Manual of Tests and Criteria", Part III, sub-section 38.3, integration testing and product performance testing.

These cells and batteries shall be packaged in accordance with packing instruction P910 of 4.1.4.1 or LP905 of 4.1.4.3, as applicable.

Articles (UN Nos. 3537, 3538, 3540, 3541, 3546, 3547 or 3548) may contain such cells or batteries provided that the applicable parts of packing instruction P006 of 4.1.4.1 or LP03 of 4.1.4.3, as applicable, are met.

The transport document shall include the following statement: "Transport in accordance with special provision 310".

Damaged or defective cells, batteries, or cells and batteries contained in equipment shall be carried in accordance with special provision 376.

Cells, batteries or cells and batteries contained in equipment carried for disposal or recycling may be packaged in accordance with special provision 377 and packing instruction P909 of 4.1.4.1.

311 Substances shall not be carried under this entry unless approved by the competent authority on the basis of the results of appropriate tests according to Part I of the *Manual of Tests and Criteria*. Packaging shall ensure that the percentage of diluent does not fall below that stated in the competent authority approval, at any time during carriage.

312 and 313 (Deleted)

314 (a) These substances are liable to exothermic decomposition at elevated temperatures. Decomposition can be initiated by heat or by impurities (e.g. powdered metals (iron, manganese, cobalt, magnesium) and their compounds);

(b) During the course of carriage, these substances shall be shaded from direct sunlight and all sources of heat and be placed in adequately ventilated areas.

- 315 This entry shall not be used for Class 6.1 substances which meet the inhalation toxicity criteria for packing group I described in 2.2.61.1.8.
- 316 This entry applies only to calcium hypochlorite, dry, when carried in non friable tablet form.
- 317 "Fissile-excepted" applies only to those fissile material and packages containing fissile material which are excepted in accordance with 2.2.7.2.3.5.
- 318 For the purposes of documentation, the proper shipping name shall be supplemented with the technical name (see 3.1.2.8). When the infectious substances to be carried are unknown, but suspected of meeting the criteria for inclusion in Category A and assignment to UN No. 2814 or 2900, the words "suspected Category A infectious substance" shall be shown, in parentheses, following the proper shipping name on the transport document.
- 319 Substances packed and packages which are marked in accordance with packing instruction P650 are not subject to any other requirements of ADR.
- 320 *(Deleted)*
- 321 These storage systems shall always be considered as containing hydrogen.
- 322 When carried in non-friable tablet form, these goods are assigned to packing group III.
- 323 *(Reserved)*
- 324 This substance needs to be stabilized when in concentrations of not more than 99 %.
- 325 In the case of non-fissile or fissile excepted uranium hexafluoride, the material shall be classified under UN No. 2978.
- 326 In the case of fissile uranium hexafluoride, the material shall be classified under UN No. 2977.
- 327 Waste aerosols and waste gas cartridges consigned in accordance with 5.4.1.1.3.1 may be carried under UN Nos. 1950 or 2037, as appropriate, for the purposes of reprocessing or disposal. They need not be protected against movement and inadvertent discharge provided that measures to prevent dangerous build-up of pressure and dangerous atmospheres are addressed. Waste aerosols, other than those leaking or severely deformed, shall be packed in accordance with packing instruction P207 and special provision PP87, or packing instruction LP200 and special packing provision L2. Waste gas cartridges, other than those leaking or severely deformed, shall be packed in accordance with packing instruction P003 and special packing provisions PP17 and PP96, or packing instruction LP200 and special packing provision L2. Leaking or severely deformed aerosols and gas cartridges shall be carried in salvage pressure receptacles or salvage packagings provided appropriate measures are taken to ensure there is no dangerous build-up of pressure.

*NOTE: For maritime carriage, waste aerosols and waste gas cartridges shall not be carried in closed containers.*

Waste gas cartridges that were filled with non-flammable, non-toxic gases of Class 2, group A or O and have been pierced are not subject to ADR.

- 328 This entry applies to fuel cell cartridges including when contained in equipment or packed with equipment. Fuel cell cartridges installed in or integral to a fuel cell system are regarded as contained in equipment. Fuel cell cartridge means an article that stores fuel for discharge into the fuel cell through (a) valve(s) that control(s) the discharge of fuel into the fuel cell. Fuel cell cartridges, including when contained in equipment, shall be designed and constructed to prevent fuel leakage under normal conditions of carriage.

Fuel cell cartridge design types using liquids as fuels shall pass an internal pressure test at a pressure of 100 kPa (gauge) without leakage.

Except for fuel cell cartridges containing hydrogen in metal hydride which shall be in compliance with special provision 339, each fuel cell cartridge design type shall be shown to pass a 1.2 meter drop test onto an unyielding surface in the orientation most likely to result in failure of the containment system with no loss of contents.



When lithium metal, lithium ion or sodium ion batteries are contained in the fuel cell system, the consignment shall be consigned under this entry and under the appropriate entries for UN No. 3091 LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT, UN No. 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or UN No. 3552 SODIUM ION BATTERIES CONTAINED IN EQUIPMENT.

- 329 *(Reserved)*
- 330 *(Deleted)*
- 331 *(Reserved)*
- 332 Magnesium nitrate hexahydrate is not subject to the requirements of ADR.
- 333 Ethanol and gasoline, motor spirit or petrol mixtures for use in spark-ignition engines (e.g. in automobiles, stationary engines and other engines) shall be assigned to this entry regardless of variations in volatility.
- 334 A fuel cell cartridge may contain an activator provided it is fitted with two independent means of preventing unintended mixing with the fuel during carriage.
- 335 Mixtures of solids which are not subject to the requirements of ADR and environmentally hazardous liquids or solids shall be classified as UN No. 3077 and may be carried under this entry provided there is no free liquid visible at the time the substance is loaded or at the time the packaging or cargo transport unit is closed. Each cargo transport unit shall be leakproof when used for carriage in bulk. If free liquid is visible at the time the mixture is loaded or at the time the packaging or cargo transport unit is closed, the mixture shall be classified as UN No. 3082. 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 the requirements of ADR.
- 336 A single package of non-combustible solid LSA-II or LSA-III material, if carried by air, shall not contain an activity greater than 3 000 A<sub>2</sub>.
- 337 Type B(U) and Type B(M) packages, if carried by air, shall not contain activities greater than the following:
- (a) For low dispersible radioactive material: as authorized for the package design as specified in the certificate of approval;
  - (b) For special form radioactive material: 3 000 A<sub>1</sub> or 100 000 A<sub>2</sub>, whichever is the lower; or
  - (c) For all other radioactive material: 3 000 A<sub>2</sub>.
- 338 Each fuel cell cartridge carried under this entry and designed to contain a liquefied flammable gas shall:
- (a) Be capable of withstanding, without leakage or bursting, a pressure of at least two times the equilibrium pressure of the contents at 55 °C;
  - (b) Not contain more than 200 ml liquefied flammable gas, the vapour pressure of which shall not exceed 1 000 kPa at 55 °C; and
  - (c) Pass the hot water bath test prescribed in 6.2.6.3.1.
- 339 Fuel cell cartridges containing hydrogen in a metal hydride carried under this entry shall have a water capacity less than or equal to 120 ml.

The pressure in the fuel cell cartridge shall not exceed 5 MPa at 55 °C. The design type shall withstand, without leaking or bursting, a pressure of twice the design pressure of the cartridge at 55 °C or 200 kPa more than the design pressure of the cartridge at 55 °C, whichever is greater. The pressure at which this test is conducted is referred to in the drop test and the hydrogen cycling test as the "minimum shell burst pressure".



Fuel cell cartridges shall be filled in accordance with procedures provided by the manufacturer. The manufacturer shall provide the following information with each fuel cell cartridge:

- (a) Inspection procedures to be carried out before initial filling and before refilling of the fuel cell cartridge;
- (b) Safety precautions and potential hazards to be aware of;
- (c) Method for determining when the rated capacity has been achieved;
- (d) Minimum and maximum pressure range;
- (e) Minimum and maximum temperature range; and
- (f) Any other requirements to be met for initial filling and refilling including the type of equipment to be used for initial filling and refilling.

The fuel cell cartridges shall be designed and constructed to prevent fuel leakage under normal conditions of carriage. Each cartridge design type, including cartridges integral to a fuel cell, shall be subjected to and shall pass the following tests:

#### **Drop test**

A 1.8 metre drop test onto an unyielding surface in four different orientations:

- (a) Vertically, on the end containing the shut-off valve assembly;
- (b) Vertically, on the end opposite to the shut-off valve assembly;
- (c) Horizontally, onto a steel apex with a diameter of 38 mm, with the steel apex in the upward position; and
- (d) At a 45° angle on the end containing the shut-off valve assembly.

There shall be no leakage, determined by using a soap bubble solution or other equivalent means on all possible leak locations, when the cartridge is charged to its rated charging pressure. The fuel cell cartridge shall then be hydrostatically pressurized to destruction. The recorded burst pressure shall exceed 85 % of the minimum shell burst pressure.

#### **Fire test**

A fuel cell cartridge filled to rated capacity with hydrogen shall be subjected to a fire engulfment test. The cartridge design, which may include a vent feature integral to it, is deemed to have passed the fire test if:

- (a) The internal pressure vents to zero gauge pressure without rupture of the cartridge; or
- (b) The cartridge withstands the fire for a minimum of 20 minutes without rupture.

#### **Hydrogen cycling test**

This test is intended to ensure that a fuel cell cartridge design stress limits are not exceeded during use.

The fuel cell cartridge shall be cycled from not more than 5 % rated hydrogen capacity to not less than 95 % rated hydrogen capacity and back to not more than 5 % rated hydrogen capacity. The rated charging pressure shall be used for charging and temperatures shall be held within the operating temperature range. The cycling shall be continued for at least 100 cycles.

Following the cycling test, the fuel cell cartridge shall be charged and the water volume displaced by the cartridge shall be measured. The cartridge design is deemed to have passed the hydrogen cycling test if the water volume displaced by the cycled cartridge does not exceed the water volume displaced by an uncycled cartridge charged to 95 % rated capacity and pressurized to 75 % of its minimum shell burst pressure.

**Production leak test**

Each fuel cell cartridge shall be tested for leaks at  $15\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ , while pressurized to its rated charging pressure. There shall be no leakage, determined by using a soap bubble solution or other equivalent means on all possible leak locations.

Each fuel cell cartridge shall be permanently marked with the following information:

- (a) The rated charging pressure in MPa;
- (b) The manufacturer's serial number of the fuel cell cartridges or unique identification number; and
- (c) The date of expiry based on the maximum service life (year in four digits; month in two digits).

340 Chemical kits, first aid kits and polyester resin kits containing dangerous substances in inner packagings which do not exceed the quantity limits for excepted quantities applicable to individual substances as specified in column (7b) of Table A of Chapter 3.2, may be carried in accordance with Chapter 3.5. Class 5.2 substances, although not individually authorized as excepted quantities in column (7b) of Table A of Chapter 3.2, are authorized in such kits and are assigned Code E2 (see 3.5.1.2).

341 *(Reserved)*

342 Glass inner receptacles (such as ampoules or capsules) intended only for use in sterilization devices, when containing less than 30 ml of ethylene oxide per inner packaging with not more than 300 ml per outer packaging, may be carried in accordance with the provisions in Chapter 3.5, irrespective of the indication of "E0" in column (7b) of Table A of Chapter 3.2 provided that:

- (a) After filling, each glass inner receptacle has been determined to be leak-tight by placing the glass inner receptacle in a hot water bath at a temperature, and for a period of time, sufficient to ensure that an internal pressure equal to the vapour pressure of ethylene oxide at  $55\text{ }^{\circ}\text{C}$  is achieved. Any glass inner receptacle showing evidence of leakage, distortion or other defect under this test shall not be carried under the terms of this special provision;
- (b) In addition to the packaging required by 3.5.2, each glass inner receptacle is placed in a sealed plastics bag compatible with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the glass inner receptacle; and
- (c) Each glass inner receptacle is protected by a means of preventing puncture of the plastics bag (e.g. sleeves or cushioning) in the event of damage to the packaging (e.g. by crushing).

343 This entry applies to crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard. The packing group assigned shall be determined by the flammability hazard and inhalation hazard, in accordance with the degree of danger presented.

344 The provisions of 6.2.6 shall be met.

345 This gas contained in open cryogenic receptacles with a maximum capacity of 1 litre constructed with glass double walls having the space between the inner and outer wall evacuated (vacuum insulated) is not subject to ADR provided each receptacle is carried in an outer packaging with suitable cushioning or absorbent materials to protect it from impact damage.

346 Open cryogenic receptacles conforming to the requirements of packing instruction P203 of 4.1.4.1 and containing no dangerous goods except for UN No. 1977 nitrogen, refrigerated liquid, which is fully absorbed in a porous material are not subject to any other requirements of ADR.

347 This entry shall only be used if the results of test series 6 (d) of Part I of the *Manual of Tests and Criteria* have demonstrated that any hazardous effects arising from functioning are confined within the package.



- 348 Lithium batteries manufactured after 31 December 2011 and sodium ion batteries manufactured after 31 December 2025 shall be marked with the watt-hour rating on the outside case.
- 349 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.
- 350 Ammonium bromate and its aqueous solutions and mixtures of a bromate with an ammonium salt are not to be accepted for carriage.
- 351 Ammonium chlorate and its aqueous solutions and mixtures of a chlorate with an ammonium salt are not to be accepted for carriage.
- 352 Ammonium chlorite and its aqueous solutions and mixtures of a chlorite with an ammonium salt are not to be accepted for carriage.
- 353 Ammonium permanganate and its aqueous solutions and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage.
- 354 This substance is toxic by inhalation.
- 355 Oxygen cylinders for emergency use carried under this entry may include installed actuating cartridges (cartridges, power device of Division 1.4, Compatibility Group C or S), without changing the classification in Class 2 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per oxygen cylinder. The cylinders with the installed actuating cartridges as prepared for carriage shall have an effective means of preventing inadvertent activation.
- 356 Metal hydride storage systems intended to be installed in vehicles, wagons, vessels, machinery, engines or aircraft shall be approved by the competent authority of the country of manufacture<sup>1</sup> before acceptance for carriage. The transport document shall include an indication that the package was approved by the competent authority of the country of manufacture<sup>1</sup> or a copy of the competent authority of the country of manufacture<sup>1</sup> approval shall accompany each consignment.
- 357 Petroleum crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard shall be consigned under the entry UN 3494 PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC.
- 358 Nitroglycerin solution in alcohol with more than 1 % but not more than 5 % nitroglycerin may be classified in Class 3 and assigned to UN No. 3064 provided all the requirements of packing instruction P300 of 4.1.4.1 are complied with.
- 359 Nitroglycerin solution in alcohol with more than 1 % but not more than 5 % nitroglycerin shall be classified in Class 1 and assigned to UN No. 0144 if not all the requirements of packing instruction P300 of 4.1.4.1 are complied with.
- 360 Vehicles only powered by lithium metal, lithium ion or sodium ion batteries shall be assigned to the entries UN 3556 VEHICLE, LITHIUM ION BATTERY POWERED or UN 3557 VEHICLE, LITHIUM METAL BATTERY POWERED or UN 3558 VEHICLE, SODIUM ION BATTERY POWERED, as applicable. Lithium batteries installed in cargo transport units, designed only to provide power external to the transport unit shall be assigned to entry UN 3536 LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT lithium ion batteries or lithium metal batteries.
- 361 This entry applies to electric double layer capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to ADR. Energy storage capacity means the energy held by a capacitor, as calculated using the nominal voltage and capacitance. All capacitors to which this entry applies, including capacitors containing an electrolyte that does not meet the classification criteria of any class of dangerous goods, shall meet the following conditions:

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<sup>1</sup> If the country of manufacture is not a Contracting Party to ADR, the approval shall be recognized by the competent authority of a Contracting Party to ADR.



- (a) Capacitors not installed in equipment shall be carried in an uncharged state. Capacitors installed in equipment shall be carried either in an uncharged state or protected against short circuit;
- (b) Each capacitor shall be protected against a potential short circuit hazard in carriage as follows:
  - (i) When a capacitor's energy storage capacity is less than or equal to 10 Wh or when the energy storage capacity of each capacitor in a module is less than or equal to 10 Wh, the capacitor or module shall be protected against short circuit or be fitted with a metal strap connecting the terminals; and
  - (ii) When the energy storage capacity of a capacitor or a capacitor in a module is more than 10 Wh, the capacitor or module shall be fitted with a metal strap connecting the terminals;
- (c) Capacitors containing dangerous goods shall be designed to withstand a 95 kPa pressure differential;
- (d) Capacitors shall be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid which is released upon venting shall be contained by the packaging or by the equipment in which a capacitor is installed; and
- (e) Capacitors shall be marked with the energy storage capacity in Wh.

Capacitors containing an electrolyte not meeting the classification criteria of any class of dangerous goods, including when installed in equipment, are not subject to other provisions of ADR.

Capacitors containing an electrolyte meeting the classification criteria of any class of dangerous goods, with an energy storage capacity of 10 Wh or less are not subject to other provisions of ADR when they are capable of withstanding a 1.2 metre drop test unpackaged on an unyielding surface without loss of contents.

Capacitors containing an electrolyte meeting the classification criteria of any class of dangerous goods that are not installed in equipment and with an energy storage capacity of more than 10 Wh are subject to ADR.

Capacitors installed in equipment and containing an electrolyte meeting the classification criteria of any class of dangerous goods, are not subject to other provisions of ADR provided the equipment is packaged in a strong outer packaging constructed of suitable material, and of adequate strength and design in relation to the packaging's intended use and in such a manner as to prevent accidental functioning of capacitors during carriage. Large robust equipment containing capacitors may be offered for carriage unpackaged or on pallets when capacitors are afforded equivalent protection by the equipment in which they are contained.

**NOTE:** *Capacitors which by design maintain a terminal voltage (e.g. asymmetrical capacitors) do not belong to this entry.*

362 (Reserved)

363 This entry may only be used when the conditions of this special provision are met. No other requirements of ADR apply.

- (a) This entry applies to engines or machinery, powered by fuels classified as dangerous goods via internal combustion systems or fuel cells (e.g. combustion engines, generators, compressors, turbines, heating units, etc.), except vehicle equipment assigned to UN No. 3166 referred to in special provision 666.

**NOTE:** *This entry does not apply to equipment referred to in 1.1.3.2 (a), (d) and (e), 1.1.3.3 and 1.1.3.7.*

- (b) Engines or machinery which are empty of liquid or gaseous fuels and which do not contain other dangerous goods, are not subject to ADR.

**NOTE 1:** *An engine or machinery is considered to be empty of liquid fuel when the liquid fuel tank has been drained and the engine or machinery cannot be operated due to a lack of fuel. Engine or machinery components such as fuel lines, fuel filters and injectors do not need to be cleaned, drained or purged to be considered empty of liquid fuels. In addition, the liquid fuel tank does not need to be cleaned or purged.*

**NOTE 2:** *An engine or machinery is considered to be empty of gaseous fuels when the gaseous fuel tanks are empty of liquid (for liquefied gases), the pressure in the tanks does not exceed 2 bar and the fuel shut-off or isolation valve is closed and secured.*

- (c) Engines and machinery containing fuels meeting the classification criteria of Class 3, shall be assigned to the entries UN 3528 ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or UN No. 3528 ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or UN No. 3528 MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or UN No. 3528 MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED, as appropriate.
- (d) Engines and machinery containing fuels meeting the classification criteria of flammable gases of Class 2, shall be assigned to the entries UN 3529 ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN No. 3529 ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or UN No. 3529 MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN No. 3529 MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED, as appropriate.

Engines and machinery powered by both a flammable gas and a flammable liquid shall be assigned to the appropriate UN No. 3529 entry.

- (e) Engines and machinery containing liquid fuels meeting the classification criteria of 2.2.9.1.10 for environmentally hazardous substances and not meeting the classification criteria of any other class shall be assigned to the entries UN 3530 ENGINE, INTERNAL COMBUSTION or UN No. 3530 MACHINERY, INTERNAL COMBUSTION, as appropriate.
- (f) Engines or machinery may contain other dangerous goods than fuels (e.g. batteries, fire extinguishers, compressed gas accumulators or safety devices) required for their functioning or safe operation without being subject to any additional requirements for these other dangerous goods, unless otherwise specified in ADR. However, lithium batteries shall meet the provisions of 2.2.9.1.7.1, except (a), (e) (vii), (f) (iii) if applicable, (f) (iv) if applicable and (g) do not apply when batteries of a production run of not more than 100 cells or batteries, or pre-production prototypes of cells or batteries when these prototypes are carried for testing, are installed in machinery or engines. Furthermore, sodium ion batteries shall meet the provisions of 2.2.9.1.7.2, except that (a), (e) and (f) do not apply when batteries of a production run of not more than 100 cells or batteries, or pre-production prototypes of cells or batteries when these prototypes are carried for testing, are installed in machinery or engines.
- (g) The engine or machinery, including the means of containment containing dangerous goods, shall be in compliance with the construction requirements specified by the competent authority of the country of manufacture<sup>2</sup>;
- (h) Any valves or openings (e.g. venting devices) shall be closed during carriage;
- (i) The engines or machinery shall be oriented to prevent inadvertent leakage of dangerous goods and secured by means capable of restraining the engines or machinery to prevent any movement during carriage which would change the orientation or cause them to be damaged;
- (j) For UN No. 3528 and UN No. 3530:

<sup>2</sup> For example, compliance with the relevant provisions of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (Official Journal of the European Union No. L 157 of 9 June 2006, pp. 0024-0086).



Where the engine or machinery contains more than 60 l of liquid fuel and has a capacity of more than 450 l but not more than 3 000 l, it shall be labelled on two opposite sides in accordance with 5.2.2.

Where the engine or machinery contains more than 60 l of liquid fuel and has a capacity of more than 3 000 l, it shall be placarded on two opposite sides. Placards shall correspond to the labels required in column (5) of Table A of Chapter 3.2 and shall conform to the specifications given in 5.3.1.7. Placards shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.

*NOTE: On engines and machinery with a capacity of more than 450 l but containing 60 l of liquid fuel or less, labelling and placarding compliant with the above requirements are permitted.*

(k) For UN No. 3529:

Where the fuel tank of the engine or machinery has a water capacity of more than 450 l but not more than 1 000 l, it shall be labelled on two opposite sides in accordance with 5.2.2.

Where the fuel tank of the engine or machinery has a water capacity of more than 1 000 l, it shall be placarded on two opposite sides. Placards shall correspond to the labels required in column (5) of Table A of Chapter 3.2 and shall conform to the specifications given in 5.3.1.7. Placards shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.

(l) When the engine or machinery contains more than 1 000 l of liquid fuels, for UN No. 3528 and UN No. 3530, or the fuel tank has a water capacity of more than 1 000 l, for UN No. 3529:

- A transport document in accordance with 5.4.1 is required. This transport document shall contain the following additional statement "Transport in accordance with special provision 363";
- For carriage that includes passage through restricted tunnels, the transport unit shall display orange-coloured plates according to 5.3.2 and the tunnel restrictions according to 8.6.4 apply;

(m) The requirements specified in packing instruction P005 of 4.1.4.1 shall be met.

364 This article may only be carried under the provisions of Chapter 3.4 if, as presented for carriage, the package is capable of passing the test in accordance with test series 6(d) of Part I of the *Manual of Tests and Criteria* as determined by the competent authority.

365 For manufactured instruments and articles containing mercury or gallium, see UN Nos. 3506 or 3554, as appropriate.

366 Manufactured instruments and articles containing not more than 1 kg of mercury or gallium are not subject to ADR.

367 For the purposes of documentation:

The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package;

The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package;

The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and

The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package.



368 In the case of non-fissile or fissile-excepted uranium hexafluoride, the material shall be classified under UN No. 3507 or UN No. 2978.

369 In accordance with 2.1.3.5.3 (a), this radioactive material in an excepted package possessing toxic and corrosive properties is classified in Class 6.1 with radioactivity and corrosivity subsidiary hazards.

Uranium hexafluoride may be classified under this entry only if the conditions of 2.2.7.2.4.1.2, 2.2.7.2.4.1.5, 2.2.7.2.4.5.2 and, for fissile-excepted material, of 2.2.7.2.3.5 are met.

In addition to the provisions applicable to the carriage of Class 6.1 substances with a corrosivity subsidiary hazard, the provisions of 5.1.3.2, 5.1.5.2.2, 5.1.5.4.1 (b), 7.5.11 CV33 (3.1), (5.1) to (5.4) and (6) shall apply.

No Class 7 label is required to be displayed.

370 This entry only applies to ammonium nitrate that meets one of the following criteria:

- (a) Ammonium nitrate with more than 0.2 % combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance; or
- (b) Ammonium nitrate with not more than 0.2 % combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance, that gives a positive result when tested in accordance with test series 2 (see *Manual of Tests and Criteria*, Part I). See also UN No. 1942.

This entry shall not be used for ammonium nitrate for which a proper shipping name already exists in Table A of Chapter 3.2 including ammonium nitrate mixed with fuel oil (ANFO) or any of the commercial grades of ammonium nitrate.

371 (1) This entry also applies to articles, containing a small pressure receptacle with a release device. Such articles shall comply with the following requirements:

- (a) The water capacity of the pressure receptacle shall not exceed 0.5 litres and the working pressure shall not exceed 25 bar at 15 °C;
- (b) The minimum burst pressure of the pressure receptacle shall be at least four times the pressure of the gas at 15 °C;
- (c) Each article shall be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing, carriage and use. This may be fulfilled by an additional locking device linked to the activator;
- (d) Each article shall be manufactured in such a way as to prevent hazardous projections of the pressure receptacle or parts of the pressure receptacle;
- (e) Each pressure receptacle shall be manufactured from material which will not fragment upon rupture;
- (f) The design type of the article shall be subjected to a fire test. For this test, the provisions of paragraphs 16.6.1.2 except letter g, 16.6.1.3.1 to 16.6.1.3.4, 16.6.1.3.6, 16.6.1.3.7 (b) and 16.6.1.3.8 of the *Manual of Tests and Criteria* shall be applied. It shall be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments of the article do not rocket more than 10 metres;
- (g) The design type of the article shall be subjected to the following test. A stimulating mechanism shall be used to initiate one article in the middle of the packaging. There shall be no hazardous effects outside the package such as disruption of the package, metal fragments or a receptacle which passes through the packaging.

(2) The manufacturer shall produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer shall apply procedures to ensure that articles produced in series are made of good quality, conform to the design type and are able to meet the requirements in (1). The manufacturer shall provide such information to the competent authority on request.