

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1830	SULPHURIC ACID with more than 51% acid	8	C1	II	8+N3	N	4	3			97	1.4 - 1.84	3	yes			no	PP, EP	0	8; 22; 30; 34
1831	SULPHURIC ACID, FUMING	8	CT1	I	8+6.1	C	2	2		50	95	1.94	1	no			no	PP, EP, TOX, A	2	8
1832	SULPHURIC ACID, SPENT	8	C1	II	8	N	4	3			97		3	yes			no	PP, EP	0	8; 30; 34
1846	CARBON TETRACHLORIDE	6.1	T1	II	6.1+N2+S	C	2	2	3	50	95	1.59	2	no			no	PP, EP, TOX, A	2	23
1848	PROPIONIC ACID with not less than 10% and less than 90% acid by mass	8	C3	III	8+N3	N	3	3			97	0.99	3	yes			no	PP, EP	0	34
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 44 *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 44 *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	III	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	III	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 44 *see 3.2.3.3

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	I	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	*see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	I	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	44 *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	II	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	*see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	II	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	44 *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	*see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	44 *see 3.2.3.3
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	I	3+CMR+ F+ (N1, N2, N3)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	43
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	I	3+CMR+ F+ (N1, N2, N3)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	43; 44

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			3.1.2	2.2	2.2	2.1.1.3		(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C		3	F1	II	3+CMR+ F+ (N1, N2, N3)	C	1	1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	95	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	1	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C		3	F1	II	3+CMR+ F+ (N1, N2, N3)	C	1	1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	95			1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44	
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C		3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	2	2	3	50	95			2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	23; 38	
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C		3	F1	III	3+CMR+ F+(N1, N2, N3)	C	2	2	3	50	95			2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	23; 38; 44	
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C		3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	2	2		50	95			2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0		
1863		FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C		3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	2	2		50	95			2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
1863	FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	III	3+CMR+ F+ (N1, N2, N3)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44
1888	CHLOROFORM	6.1	T1	III	6.1+N2+ CMR	C	2	2	3	50	95	1.48	2	no			no	PP, EP, TOX, A	0	23
1897	TETRACHLOROETHYLENE	6.1	T1	III	6.1+N2+ S	C	2	2		50	95	1.62	2	no			no	PP, EP, TOX, A	0	
1912	METHYL CHLORIDE AND METHYLENE CHLORIDE MIXTURE	2	2F		2.1	G	1	1			91		1	no	T1 ¹²⁾	II A ⁸⁾	yes	PP, EX, A	1	2; 31
1915	CYCLOHEXANONE	3	F1	III	3	N	3	2			97	0.95	3	yes	T2 ¹²⁾	II A	yes	PP, EX, A	0	
1917	ETHYL ACRYLATE, STABILIZED	3	F1	II	3+unst.+ N3	C	2	2		40	95	0.92	1	yes	T2 ¹²⁾	II B (II B1)	yes	PP, EX, A	1	3; 5
1918	ISOPROPYLBENZENE (cumene)	3	F1	III	3+N2	N	3	3			97	0.86	3	yes	T2 ¹²⁾	II A ⁸⁾	yes	PP, EX, A	0	
1919	METHYL ACRYLATE, STABILIZED	3	F1	II	3+unst.+ N3	C	2	2	3	50	95	0.95	1	yes	T2 ¹²⁾	II B (II B1)	yes	PP, EX, A	1	3; 5; 23
1920	NONANES	3	F1	III	3+N2+F	N	3	3			97	0.70 - 0.75	3	yes	T3	II A	yes	PP, EX, A	0	
1922	PYRROLIDINE	3	FC	II	3+8	C	2	2		50	95	0.86	2	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, A	1	
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S.	2	2F		2.1 + CMR	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A, EP, TOX	1	2; 31

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S.	2	3F		2.1 + CMR	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A, BP, TOX	1	2; 31
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A)	2	2F		2.1	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A0)	2	2F		2.1	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A0)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A01)	2	2F		2.1	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A01)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A02)	2	2F		2.1	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A02)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A1)	2	2F		2.1	G	1	1			91		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31

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			3.1.2	2.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1965		HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A1)		2	3F			2.1	G	2	4	1; 3		95			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B)		2	2F			2.1	G	1	1			91			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B)		2	3F			2.1	G	2	4	1; 3		95			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B1)		2	2F			2.1	G	1	1			91			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B1)		2	3F			2.1	G	2	4	1; 3		95			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B2)		2	2F			2.1	G	1	1			91			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B2)		2	3F			2.1	G	2	4	1; 3		95			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE C)		2	2F			2.1	G	1	1			91			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965		HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE C)		2	3F			2.1	G	2	4	1; 3		95			1	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1969		ISOBUTANE (contains less than 0.1% 1.3-butadiene)		2	2F			2.1	G	1	1			91			1	T2 ^{1), 12)}	II A ⁷⁾	yes	PP, EX, A	1	2; 31
1969		ISOBUTANE (with 0.1% or more 1.3-butadiene)		2	2F			2.1+ CMR	G	1	1			91			1	T2 ^{1), 12)}	II A	yes	PP, EP, EX, TOX, A	1	2; 31

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1972	METHANE, REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID, with high methane content	2	3F		2.1	G	1	1	1		95		1	no	T1 ¹²⁾	IIA	yes	PP, EX, A	1	2; 31; 42
1972	METHANE, REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID with high methane content	2	3F		2.1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	IIA	yes	PP, EX, A	1	2; 31; 42
1977	NITROGEN, REFRIGERATED, LIQUID	2	3A		2.2	G	1	1	1		95		1	no			No	PP	0	31, 39, 42, 46
1978	PROPANE	2	2F		2.1	G	1	1			91		1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
1978	PROPANE, REFRIGERATED	2	3F		2.1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	FT1	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	FT1	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	FT1	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3

UN No. or substance identification No.	(1)	Name and description	(2)	(3a)	Class	Classification code	Packing group	Dangers	(5)	Type of tank vessel	(6)	Cargo tank design	(7)	Cargo tank type	(8)	Cargo tank equipment	(9)	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	(10)	Maximum degree of filling of the cargo tank in %	(11)	Relative density at 20 °C	(12)	Type of sampling device	(13)	Pump room below deck permitted	(14)	Temperature class	(15)	Explosion group	(16)	Anti-explosion protection required	(17)	Equipment required	(18)	Number of cones/blue lights	(19)	Additional requirements/Remarks	(20)
			3.1.2	2.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	3.2.3.1	1.2.1 / 7.2.2.0.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	8.1.5	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3	7.2.5	3.2.3.1				
1986		ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.		3	FT1	I	I	3+6.1+(N1, N2, N3, CMR, F or S)		C	2	2	2	2	2	*	*	95	*	95				1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3								
1986		ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.		3	FT1	II	II	3+6.1+(N1, N2, N3, CMR, F or S)		C	2	2	2	2	2	*	*	95	*	95				2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3								
1986		ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.		3	FT1	II	II	3+6.1+(N1, N2, N3, CMR, F or S)		C	2	2	2	2	2	*	*	95	*	95				2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3								
1986		ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.		3	FT1	III	III	3+6.1+(N1, N2, N3, CMR, F or S)		C	2	2	2	2	2	*	*	95	*	95				2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	27; 44 *see 3.2.3.3								
1986		ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.		3	FT1	III	III	3+6.1+(N1, N2, N3, CMR, F or S)		C	2	2	2	2	2	*	*	95	*	95				2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	27; 44 *see 3.2.3.3								
1987		ALCOHOLS, N.O.S.		3	F1	II	II	3+(N1, N2, N3, CMR, F or S)		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	yes	*	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; *see 3.2.3.3							
1987		ALCOHOLS, N.O.S.		3	F1	II	II	3+(N1, N2, N3, CMR, F or S)		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	yes	*	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44*see 3.2.3.3							

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1987	ALCOHOLS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27 *see 3.2.3.3
1987	ALCOHOLS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 27; 44 *see 3.2.3.3
1987	ALCOHOLS, N.O.S. (CYCLOHEXANOL)	3	F1	III	3+N3+F	N	3	3	2		95	0.95	3	yes	T3	II A	yes	PP, EX, A	0	7; 17
1987	ALCOHOLS, N.O.S. (CYCLOHEXANOL)	3	F1	III	3+N3+F	N	3	3	4		95	0.95	3	yes			no	PP	0	7; 17; 20; +46 °C
1987	ALCOHOLS, N.O.S. (tert-BUTANOL 90% (MASS)/METHANOL 10% (MASS) MIXTURE)	3	F1	II	3	N	2	2		10	97		3	yes	T1 ¹²⁾	II A	yes	PP, EX, A	1	
1989	ALDEHYDES, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27; *see 3.2.3.3
1989	ALDEHYDES, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
1989	ALDEHYDES, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27 *see 3.2.3.3
1989	ALDEHYDES, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 27; 44 *see 3.2.3.3

UN No. or substance identification No.	(1)	Name and description	(3a)	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks	
	(2)		2.2	2.2	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
		3.1.2	2.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1	
1991		CHLOROPRENE, STABILIZED	3	FTI	I	I	3+6.1+un st.+CMR	C	2	2	3	50	95	0.96	1	no	T2 ¹²⁾	II B (II B3)	yes	PP, EP, EX, TOX, A	2	3; 5; 23	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S.	3	FTI	I	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S.	3	FTI	I	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S	3	FTI	I	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S	3	FTI	I	I	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S	3	FTI	II	II	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95			2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
1992		FLAMMABLE LIQUID, TOXIC, N.O.S	3	FTI	II	II	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95			2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3

UN No. or substance identification No.	(1)	Name and description	(2)	(3a)	Classification code	Packing group	Dangers	Type of tank vessel	(6)	(7)	(8)	(9)	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	(10)	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks	
			3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	(20) 3.2.3.1	
1992		FLAMMABLE LIQUID, TOXIC, N.O.S		3	FT1	III	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	2	*	*	*	95			2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	27; *see 3.2.3.3
1992		FLAMMABLE LIQUID, TOXIC, N.O.S		3	FT1	III	3+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	2	*	*	*	95			2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	27; 44 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	III	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S.		3	F1	III	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 27; 44 *see 3.2.3.3
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	I	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*	*	*			*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	*see 3.2.3.3

UN No. or substance identification No.	(1)	Name and description	(3a)	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks	
		(2)	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1		3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	72.5	(20)
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	3	F1	I	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	44*see 3.2.3.3	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	3	F1	II	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	*see 3.2.3.3	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	3	F1	II	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	44 *see 3.2.3.3	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	3	F1	III	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	*see 3.2.3.3	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	3	F1	III	3+(N1, N2, N3, CMR, F)	C	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	44 *see 3.2.3.3	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	I	3+(N1, N2, N3, CMR, F)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1		
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	I	3+(N1, N2, N3, CMR, F)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44	
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1		
1993		FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	I	I			95		I	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44	

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	yes	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	1	1			95		1	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	1	1			95		1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	23; 38
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	23; 38; 44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	23; 38
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	23; 38; 44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	II	3+(N1, N2, N3, CMR, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
1993	FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	III	3+(N1, N2, N3, CMR, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1993	FLAMMABLE LIQUID, N.O.S. (CYCLOHEXANONE/CYCLOHEXANOL MIXTURE)	3	F1	III	3+F	N	3	3			97	0.95	3	yes	T3	II A	yes	PP, EX, A	0	
1999	TARS, LIQUID, including road oils, and cutback bitumens	3	F1	III	3+S	N	4	3	2		97		3	yes	T3	II A ⁷⁾	yes	PP, EX, A	0	
2014	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)	5.1	OC1	II	5.1+8+ unst.	C	2	2		35	95	1.2	2	yes			no	PP, EP	0	3; 33
2021	CHLOROPHENOLS, LIQUID (2-CHLOROPHENOL)	6.1	T1	III	6.1+N2	C	2	2		25	95	1.23	2	no	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	6; +10 °C; 17
2022	CRESYLIC ACID	6.1	TC1	II	6.1+8+3+ S	C	2	2		25	95	1.03	2	no	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	2	6; +16 °C; 17
2023	EPICHLORHYDRINE	6.1	TF1	II	6.1+3+N ₃	C	2	2		35	95	1.18	2	no	T2 ¹²⁾	II B (II B3)	yes	PP, EP, EX, TOX, A	2	5
2031	NITRIC ACID, other than red fuming, with more than 70% acid	8	CO1	I	8+5.1+N ₃	N	2	3		10	97	1.41-1.48	3	yes			no	PP, EP	0	34
2031	NITRIC ACID, other than red fuming with at least 65% but not more than 70% acid	8	CO1	II	8+5.1+N ₃	N	2	3		10	97	1.39-1.41	3	yes			no	PP, EP	0	34
2031	NITRIC ACID, other than red fuming, with less than 65% acid	8	CO1	II	8+N3	N	2	3		10	97	1.02-1.39	3	yes			no	PP, EP	0	34
2032	NITRIC ACID, RED FUMING	8	COT	I	8+5.1+6.1+N3	C	2	2		50	95	1.48-1.51	1	no			no	PP, EP, TOX, A	2	
2045	ISOBUTYRALDEHYDE (ISOBUTYL ALDEHYDE)	3	F1	II	3+N3	C	2	2	3	50	95	0.79	2	yes	T4	II A ⁷⁾	yes	PP, EX, A	1	15; 23

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2/ 3.2.3.1	1.2.1/ 7.2.2.0.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	1.2.1	1.2.1/ 3.2.3.3	1.2.1/ 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2046	CYMENES	3	F1	III	3+N2+F	N	3	3			97	0.88	3	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	
2047	DICHLOROPROPENES (2,3-DICHLOROPROP-1-ENE)	3	F1	II	3+N2+C MR	C	2	2		45	95	1.2	2	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	1	
2047	DICHLOROPROPENES (MIXTURES of 2,3-DICHLOROPROP-1-ENE and 1,3-DICHLOROPROPENE)	3	F1	II	3+N1+C MR	C	2	2		45	95	1.23	2	yes	T2 ^{1), 12)}	II A ⁷⁾	yes	PP, EP, EX, TOX, A	1	
2047	DICHLOROPROPENES (MIXTURES of 2,3-DICHLOROPROP-1-ENE and 1,3-DICHLOROPROPENE)	3	F1	III	3+N1+C MR	C	2	2		45	95	1.23	2	yes	T2 ^{1), 12)}	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	
2047	DICHLOROPROPENES (1,3-DICHLOROPROPENE)	3	F1	III	3+N1+C MR	C	2	2		40	95	1.23	2	yes	T2 ^{1), 12)}	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	
2048	DICYCLOPENTADIENE	3	F1	III	3+N2+F	N	3	3	2		95	0.94	3	yes	T1 ¹²⁾	II A	yes	PP, EX, A	0	7; 17
2050	DIISOBUTYLENE, ISOMERIC COMPOUNDS	3	F1	II	3+N2+F	N	2	3		10	97	0.72	3	yes	T3 ²⁾	II A ⁷⁾	yes	PP, EX, A	1	
2051	2-DIMETHYLAMINO ETHANOL	8	CF1	II	8+3+N3	N	3	2			97	0.89	3	yes	T3	II A ⁷⁾	yes	PP, EP, EX, A	1	34
2053	METHYL ISOBUTYL CARBINOL	3	F1	III	3	N	3	2			97	0.81	3	yes	T2 ¹²⁾	II A	yes	PP, EX, A	0	
2054	MORPHOLINE	8	CF1	I	8+3+N3	N	3	2			97	1	3	yes	T3	II A	yes	PP, EP, EX, A	1	34
2055	STYRENE MONOMER, STABILIZED	3	F1	III	3+unst.+ N3	N	3	2			97	0.91	3	yes	T1 ¹²⁾	II A	yes	PP, EX, A	0	3; 5; 16
2056	TETRAHYDROFURAN	3	F1	II	3	N	2	2		10	97	0.89	3	yes	T3	II B (II B1)	yes	PP, EX, A	1	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2057	TRIPROPYLENE	3	F1	II	3 + N1	C	2	2		35	95	0.744	2	yes	T3	II A	yes	PP, EX, A	1	
2057	TRIPROPYLENE	3	F1	III	3 + N1	C	2	2		35	95	0.73	2	yes	T3	II A	yes	PP, EX, A	0	
2078	TOLUENE DIISOCYANATE (and isomeric mixtures) (2,4- TOLUENE DIISOCYANATE)	6.1	T1	II	6.1+N2+S	C	2	2	2	25	95	1.22	2	no	T1 ¹²⁾	II B (II B3 ¹⁴⁾)	yes	PP, EP, EX, TOX, A	2	2; 7; 8; 17
2078	TOLUENE DIISOCYANATE (and isomeric mixtures) (2,4- TOLUENE DIISOCYANATE)	6.1	T1	II	6.1+N2+S	C	2	1	4	25	95	1.22	2	no			no	PP, EP, TOX, A	2	2; 7; 8; 17; 20; +112°C; 26
2079	DIETHYLENETRIAMINE	8	C7	II	8+N3	N	4	2			97	0.96	3	yes			no	PP, EP	0	34
2187	CARBON DIOXIDE, REFRIGERATED LIQUID	2	3A		2.2	G	1	1	1		95		1	yes			no	PP	0	31; 39; 42
2205	ADIPONITRILE	6.1	T1	III	6.1	C	2	2		25	95	0.96	2	no	T4	II B (II B3 ¹⁴⁾)	yes	PP, EP, EX, TOX, A	0	6; +6°C; 17
2206	ISOCYANATES, TOXIC, N.O.S. (4-CHLOROPHENYL ISOCYANATE)	6.1	T1	II	6.1+S	C	2	2	4	25	95	1.25	2	no			no	PP, EP, TOX, A	2	7; 17
2209	FORMALDEHYDE SOLUTION with not less than 25% formaldehyde	8	C9	III	8+N3	N	4	2			97	1.09	3	yes			no	PP, EP	0	15; 34
2215	MALEIC ANHYDRIDE, MOLTEN	8	C3	III	8+N3	N	3	3	2		95	0.93	3	yes	T2 ¹²⁾	II B ⁴⁾	yes	PP, EP, EX, A	0	7; 17; 25; 34
2215	MALEIC ANHYDRIDE, MOLTEN	8	C3	III	8+N3	N	3	1	4		95	0.93	3	yes			no	PP, EP	0	7; 17; 20; +88 °C; 25; 34
2218	ACRYLIC ACID, STABILIZED	8	CF1	II	8+3+unst.+N1	C	2	2	4	30	95	1.05	1	yes	T2 ¹²⁾	II B (II B1)	yes	PP, EP, EX, A	1	3; 4; 5; 17
2227	n-BUTYL METHACRYLATE, STABILIZED	3	F1	III	3+unst.+N3+F	C	2	2		25	95	0.9	1	yes	T3	II A	yes	PP, EX, A	0	3; 5

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2238	CHLOROTOLUENES (m-CHLOROTOLUENE)	3	F1	III	3+N2+S	C	2	2		30	95	1.08	2	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	
2238	CHLOROTOLUENES (o-CHLOROTOLUENE)	3	F1	III	3+N2+S	C	2	2		30	95	1.08	2	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	
2238	CHLOROTOLUENES (p-CHLOROTOLUENE)	3	F1	III	3+N2+S	C	2	2		30	95	1.07	2	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	6: +11 °C; 17
2241	CYCLOHEPTANE	3	F1	II	3+N2	N	2	3		10	97	0.81	3	yes	T4 ³⁾	II A ⁷⁾	yes	PP, EX, A	1	
2247	n-DECANE	3	F1	III	3+F	C	2	2		30	95	0.73	2	yes	T4	II A	yes	PP, EX, A	0	
2248	Di-n-BUTYLAMINE	8	CF1	II	8+3+N3	N	3	2				0.76	3	yes	T3	II A ⁷⁾	yes	PP, EP, EX, A	1	34
2259	TRIETHYLENETETRAMINE	8	C7	II	8+N2	N	3	3			97	0.98	3	yes	T2 ¹²⁾	II B (II B3 ¹⁹⁾)	yes	PP, EP, EX, A	0	6: +16 °C; 17; 34
2263	DIMETHYLCYCLOHEXANES (cis-1,4- DIMETHYL- CYCLOHEXANE)	3	F1	II	3	C	2	2		35	95	0.78	2	yes	T4 ³⁾	II A ⁷⁾	yes	PP, EX, A	1	
2263	DIMETHYLCYCLOHEXANES (trans-1,4- DIMETHYL- CYCLOHEXANE)	3	F1	II	3	C	2	2		35	95	0.76	2	yes	T4 ³⁾	II A ⁷⁾	yes	PP, EX, A	1	
2264	N,N-DIMETHYL- CYCLOHEXYLAMINE	8	CF1	II	8+3+N2	N	3	3			97	0.85	3	yes	T3	II B ⁴⁾	yes	PP, EP, EX, A	1	34
2265	N,N-DIMETHYLFORMAMIDE	3	F1	III	3+CMR	N	2	3	3	10	97	0.95	2	yes	T2 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	0	
2266	DIMETHYL-N-PROPYLAMINE	3	FC	II	3+8	C	2	2	3	50	95	0.72	2	yes	T4	II A ⁷⁾	yes	PP, EP, EX, A	1	23
2276	2-ETHYLHEXYLAMINE	3	FC	III	3+8+N3	N	3	2			97	0.79	3	yes	T3	II A ⁷⁾	yes	PP, EP, EX, A	0	34

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2278	n-HEPTENE	3	F1	II	3+N3	N	2	2		10	97	0.7	3	yes	T3	II B ⁰ (II B1)	yes	PP, EX, A	1	
2280	HEXAMETHYLENEDIAMINE, SOLID, MOLTEN	8	C8	III	8+N3	N	3	3	2		95	0.83	3	yes	T3	II B (II B3 ¹⁶)	yes	PP, EP, EX, A	0	7; 17; 34
2280	HEXAMETHYLENEDIAMINE, SOLID, MOLTEN	8	C8	III	8+N3	N	3	3	4		95	0.83	3	yes			no	PP, EP	0	7; 17; 20: +66 °C; 34
2282	HEXANOLS	3	F1	III	3+N3	N	3	2			97	0.83	3	yes	T3	II A	yes	PP, EX, A	0	
2286	PENTAMETHYLHEPTANE	3	F1	III	3+F	N	3	3			97	0.75	3	yes	T2 ¹²	II A ⁷	yes	PP, EX, A	0	
2288	ISOHEXENES	3	F1	II	3+unst.+ N3	C	2	2	3	50	95	0.735	2	yes	T2 ¹²	II B ⁰	yes	PP, EX, A	1	3; 23
2289	ISOPHORONEDIAMINE	8	C7	III	8+N2	N	3	3			97	0.92	3	yes	T2 ¹²	II A ⁷	yes	PP, EP, EX, A	0	6: +14 °C; 17; 34
2302	5-METHYLHEXAN-2-ONE	3	F1	III	3	N	3	2			97	0.81	3	yes	T1 ¹²	II A	yes	PP, EX, A	0	
2303	ISOPROPENYLBENZENE	3	F1	III	3+N2+F	N	3	3			97	0.91	3	yes	T2 ¹²	II B (II B1)	yes	PP, EX, A	0	
2309	OCTADIENE (1,7-OCTADIENE)	3	F1	II	3+N2	N	2	3		10	97	0.75	3	yes	T3	II B (II B3)	yes	PP, EX, A	1	
2311	PHENETIDINES	6.1	T1	III	6.1	C	2	2		25	95	1.07	2	no			no	PP, EP, TOX, A	0	6: +7 °C; 17
2312	PHENOL, MOLTEN	6.1	T1	II	6.1+N3+S	C	2	2	4	25	95	1.07	2	no	T1 ¹²	II A ⁹	yes	PP, EP, EX, TOX, A	2	7; 17
2312	PHENOL, MOLTEN	6.1	T1	II	6.1+N3+S	C	2	2	4	25	95	1.07	2	no			no	PP, EP, TOX, A	2	7; 17; 20: +67 °C
2320	TETRAETHYLENEPENTAMINE	8	C7	III	8+N2	N	4	3			97	1	3	yes			no	PP, EP	0	34

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2321	TRICHLOROBENZENES, LIQUID (1,2,4-TRICHLOROBENZENE)	6.1	T1	III	6.1+N1+S	C	2	2	2	25	95	1.45	2	no	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	7; 17
2321	TRICHLOROBENZENES, LIQUID (1,2,4-TRICHLOROBENZENE)	6.1	T1	III	6.1+N1+S	C	2	1	4	25	95	1.45	2	no			no	PP, EP, TOX, A	0	7; 17; 20: +95 °C; 26
2323	TRIETHYL PHOSPHITE	3	F1	III	3	N	3	2			97	0.8	3	yes	T3	II A ⁹⁾	yes	PP, EX, A	0	
2324	TRIISOBUTYLENE	3	F1	III	3+N1+F	C	2	2		35	95	0.76	2	yes	T2 ¹²⁾	II B ⁴⁾	yes	PP, EX, A	0	
2325	1,3,5-TRIMETHYLBENZENE	3	F1	III	3+N1	C	2	2		35	95	0.87	2	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	
2333	ALLYL ACETATE	3	FT1	II	3+6.1	C	2	2		40	95	0.93	2	no	T2 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	2	
2348	BUTYL ACRYLATES, STABILIZED (n-BUTYL ACRYLATE, STABILIZED)	3	F1	III	3+unst.+N3	C	2	2		30	95	0.9	1	yes	T3	II B (II B1)	yes	PP, EX, A	0	3; 5
2350	BUTYL METHYL ETHER	3	F1	II	3	N	2	2		10	97	0.74	3	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	
2356	2-CHLOROPROPANE	3	F1	I	3	C	2	2	3	50	95	0.86	2	yes	T1 ¹²⁾	II A	yes	PP, EX, A	1	23
2357	CYCLOHEXYLAMINE	8	CF1	II	8+3+N3	N	3	2			97	0.86	3	yes	T3	II A	yes	PP, EP, EX, A	1	34
2362	1,1-DICHLOROETHANE	3	F1	II	3+N2	C	2	2	3	50	95	1.17	2	yes	T2 ¹²⁾	II A	yes	PP, EX, A	1	23
2370	1-HEXENE	3	F1	II	3+N3	N	2	2		10	97	0.67	3	yes	T3	II A ⁹⁾	yes	PP, EX, A	1	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2/ 3.2.3.1	1.2.1/ 7.2.2.0.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	1.2.1/ 3.2.3.3	1.2.1/ 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2381	DIMÉTHYL DISULPHIDE	3	FT1	II	3+6.1	C	2	2		40	95	1.063	2	yes	T2 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	
2382	DIMETHYLHYDRAZINE, SYMMETRICAL	6.1	TF1	I	6.1+3+C MR	C	2	2		50	95	0.83	1	no	T4 ³⁾	II C ⁹⁾	yes	PP, EP, EX, TOX, A	2	
2383	DIPROPYLAMINE	3	FC	II	3+8+N3	C	2	2		35	95	0.74	2	yes	T3	II A	yes	PP, EP, EX, A	1	
2397	3-METHYLBUTAN-2-ONE	3	F1	II	3	N	2	2		10	97	0.81	3	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	1	
2398	METHYL tert-BUTYL ETHER	3	F1	II	3	N	2	2		10	97	0.74	3	yes	T1 ¹²⁾	II A	yes	PP, EX, A	1	
2404	PROPIONITRILE	3	FT1	II	3+6.1	C	2	2		45	95	0.78	2	no	T1 ^{9), 12)}	II A ⁷⁾	yes	PP, EP, EX, TOX, A	2	
2414	THIOPHENE	3	F1	II	3+N3+S	N	2	3		10	97	1.06	3	yes	T2 ¹²⁾	II A	yes	PP, EX, A	1	
2430	ALKYLPHENOLS, SOLID, N.O.S. (NONYLPHENOL, ISOMERIC MIXTURE, MOLTEN)	8	C4	II	8+N1+F	N	3	1	2		95	0.95	2	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, A	0	7; 17; 34
2430	ALKYLPHENOLS, SOLID, N.O.S. (NONYLPHENOL, ISOMERIC MIXTURE, MOLTEN)	8	C4	II	8+N1+F	N	3	2	4		95	0.95	2	yes			no	PP, EP	0	7; 17; 20; +125 °C; 34
2432	N,N-DIETHYLANILINE	6.1	T1	III	6.1+N2	C	2	2		25	95	0.93	2	no			no	PP, EP, TOX, A	0	
2448	SULPHUR, MOLTEN	4.1	F3	III	4.1+S	N	4	1	4		95	2.07	3	yes			no	PP, EP, TOX*, A	0	* Toximeter for H2S; 7; 17; 20; +150°C; 28; 32

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2458	HEXADIENES	3	F1	II	3+N3	N	2	2		10	97	0.72	3	yes	T4 ³⁾	II A ⁷⁾	yes	PP, EX, A	1	
2477	METHYL ISOTHIOCYANATE	6.1	TF1	I	6.1+3+N ₁	C	2	2	2	35	95	1,07 ¹⁰⁾	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	7; 17
2485	n-BUTYL ISOCYANATE	6.1	TF1	I	6.1+3	C	2	2		35	95	0.89	1	no	T2 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	
2486	ISOBUTYL ISOCYANATE	6.1	TF1	I	6.1+3	C	2	2		40	95		1	no	T4 ³⁾	II A	yes	PP, EP, EX, TOX, A	2	
2487	PHENYL ISOCYANATE	6.1	TF1	I	6.1+3	C	2	2		25	95	1.1	1	no	T1 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	
2490	DICHLOROISOPROPYL ETHER	6.1	T1	II	6.1	C	2	2		25	95	1.11	2	no			no	PP, EP, EX, TOX, A	2	
2491	ETHANOLAMINE or ETHANOLAMINE SOLUTION	8	C7	III	8+N3	N	3	2			97	1.02	3	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, A	0	6; +14°C; 17; 34
2493	HEXAMETHYLENEIMINE	3	FC	II	3+8+N3	N	3	2			97	0.88	3	yes	T3 ²⁾	II A	yes	PP, EP, EX, A	1	34
2496	PROPIONIC ANHYDRIDE	8	C3	III	8+N3	N	4	3			97	1.02	3	yes			no	PP, EP	0	34
2518	1,5,9-CYCLODECATRIENE	6.1	T1	III	6.1+F	C	2	2		25	95	0.9	2	no			no	PP, EP, TOX, A	0	
2527	ISOBUTYL ACRYLATE, STABILIZED	3	F1	III	3+unst.	C	2	2		30	95	0.89	1	yes	T2 ¹²⁾	II B3 ¹⁴⁾	yes	PP, EX, A	0	3; 5
2528	ISOBUTYL ISOBUTYRATE	3	F1	III	3+N3	N	3	2			97	0.86	3	yes	T2 ¹²⁾	II A	yes	PP, EX, A	0	
2531	METHACRYLIC ACID, STABILIZED	8	C3	II	8+unst.+N3	C	2	2	4	25	95	1.02	1	yes	T2 ¹²⁾	II A	yes	PP, EP, EX, A	0	3; 4; 5; 7; 17

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2564	TRICHLOROACETIC ACID SOLUTION	8	C3	II	8+N1	C	2	2	2	25	95	1,62 ⁽¹⁰⁾	2	yes	T1 ⁽¹²⁾	II A ⁽⁷⁾	yes	PP, EP, EX, A	0	7; 17; 22
2564	TRICHLOROACETIC ACID SOLUTION	8	C3	III	8+N1	C	2	2		25	95	1,62 ⁽¹⁰⁾	2	yes			no	PP, EP	0	22
2574	TRICRESYL PHOSPHATE with more than 3% ortho isomer	6.1	T1	II	6.1+N1+S	C	2	2		25	95	1.18	2	no			no	PP, EP, TOX, A	2	
2579	PIPERAZINE, MOLTEN	8	C8	III	8+N2	N	3	3	2		95	0.9	3	yes			no	PP, EP	0	7; 17; 34
2582	FERRIC CHLORIDE SOLUTION	8	C1	III	8	N	4	3			97	1.45	3	yes			no	PP, EP	0	22; 30; 34
2586	ALKYLSULPHONIC ACIDS, LIQUID with not more than 5% free sulphuric acid	8	C3	III	8	N	4	3			97		3	yes			no	PP, EP	0	34
2608	NITROPROPANES	3	F1	III	3	N	3	2			97	1	3	yes	T2 ⁽¹²⁾	II B ⁽⁷⁾ (II B2)	yes	PP, EX, A	0	
2615	ETHYL PROPYL ETHER	3	F1	II	3	N	2	2		10	97	0.73	3	yes	T4 ⁽³⁾	II A ⁽⁷⁾	yes	PP, EX, A	1	
2618	VINYLTOLUENES, STABILIZED	3	F1	III	3+unst.+ N2+F	C	2	2		25	95	0.92	1	yes	T1 ⁽¹²⁾	II A	yes	PP, EX, A	0	3; 5
2651	4,4'-DIAMINO-DIPHENYLMETHANE	6.1	T2	III	6.1+N2+CMR+S	C	2	2	2	25	95	1	2	no			no	PP, EP, TOX, A	0	7; 17
2672	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10% but not more than 35% ammonia (more than 25% but not more than 35% ammonia)	8	C5	III	8+N1	C	2	2	1	50	95	0.88 ⁽¹⁰⁾ - 0.96 ⁽¹⁰⁾	2	yes			no	PP, EP	0	
2672	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10% but not more than 35% ammonia (not more than 25% ammonia)	8	C5	III	8+N3	N	2	2		10	95	0.88 ⁽¹⁰⁾ - 0.96 ⁽¹⁰⁾	2	yes			no	PP, EP	0	34

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2683	AMMONIUM SULPHIDE SOLUTION	8	CFT	II	8+3+6.1	C	2	2		50	95		2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	15; 16
2693	BISULPHITES, AQUEOUS SOLUTION, N.O.S.	8	C1	III	8	N	4	3			97		3	yes			no	PP, EP	0	27; 34
2709	BUTYLBENZENES	3	F1	III	3+NI+F	N	2	3		35	97	0.87	2	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	0	41
2709	BUTYLBENZENES (n-BUTYLBENZENE)	3	F1	III	3+NI+F	N	3	3			97	0.87	2	yes	T2 ¹²⁾	II A	yes	PP, EX, A	0	41
2733	AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S. (2-AMINOBUTANE)	3	FC	II	3+8+NI	C	2	2	3	50	95	0.72	2	yes	T4 ³⁾	II A ⁷⁾	yes	PP, EP, EX, A	1	23
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	I	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	II	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	III	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
2754	N-ETHYLTOLUIDINES (N-ETHYL-o-TOLUIDINE)	6.1	T1	II	6.1+F	C	2	2		25	95	0.94	2	no			no	PP, EP, TOX, A	2	
2754	N-ETHYLTOLUIDINES (N-ETHYL-m-TOLUIDINE)	6.1	T1	II	6.1+F	C	2	2		25	95	0.94	2	no			no	PP, EP, TOX, A	2	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2754	N-ETHYLTOLUIDINES (N-ETHYL-o-TOLUIDINE and N-ETHYL-m-TOLUIDINE MIXTURES)	6.1	T1	II	6.1+F	C	2	2		25	95	0.94	2	no			no	PP, EP, TOX, A	2	
2754	N-ETHYLTOLUIDINES (N-ETHYL-p-TOLUIDINE)	6.1	T1	II	6.1+F	C	2	2	2	25	95	0.94	2	no			no	PP, EP, TOX, A	2	7; 17
2785	4-THIAPENTANAL (3-METHYLMERCAPTO-PROPIONALDEHYDE)	6.1	T1	III	6.1	C	2	2		25	95	1.04	2	no			no	PP, EP, TOX, A	0	
2789	ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass	8	CF1	II	8+3	N	2	3	2	10	95	1.05 with 100% acid	3	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, A	1	7; 17; 34
2790	ACETIC ACID SOLUTION, not less than 50% but not more than 80% acid, by mass	8	C3	II	8	N	2	3		10	97		3	yes			no	PP, EP	0	34
2790	ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass	8	C3	III	8	N	2	3		10	97		3	yes			no	PP, EP	0	34
2796	BATTERY FLUID, ACID	8	C1	II	8+N3	N	4	3			97	1.00 - 1.84	3	yes			no	PP, EP	0	8; 22; 30; 34
2796	SULPHURIC ACID with not more than 51% acid	8	C1	II	8+N3	N	4	3			97	1.00 - 1.41	3	yes			no	PP, EP	0	8; 22; 30; 34
2797	BATTERY FLUID, ALKALI	8	C5	II	8+N3	N	4	3			97	1.00 - 2.13	3	yes			no	PP, EP	0	22; 30; 34
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1	T1	I	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1	T1	II	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1	T1	III	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	0	27; *see 3.2.3.3
2811	TOXIC SOLID, ORGANIC, N.O.S. (1.2.3-TRICHLOROBENZENE, MOLTEN)	6.1	T2	III	6.1+S	C	2	2	2	25	95		2	no	T4 ³⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	7; 17; 22
2811	TOXIC SOLID, ORGANIC, N.O.S. (1.2.3-TRICHLOROBENZENE, MOLTEN)	6.1	T2	III	6.1+S	C	2	1	4	25	95		2	no			no	PP, EP, TOX, A	0	7; 17; 20; +92 °C; 22; 26
2811	TOXIC SOLID, ORGANIC, N.O.S. (1.3.5-TRICHLOROBENZENE, MOLTEN)	6.1	T2	III	6.1+S	C	2	2	2	25	95		2	no	T4 ³⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	7; 17; 22
2811	TOXIC SOLID, ORGANIC, N.O.S. (1.3.5-TRICHLOROBENZENE, MOLTEN)	6.1	T2	III	6.1+S	C	2	1	4	25	95		2	no			no	PP, EP, TOX, A	0	7; 17; 20; +92 °C; 22; 26
2815	N-AMINOETHYL PIPERAZINE	8	C7	III	8+N2	N	4	3			97	0.98	3	yes			no	PP, EP	0	34
2820	BUTYRIC ACID	8	C3	III	8+N3	N	2	3		10	97	0.96	3	yes			no	PP, EP	0	34
2829	CAPROIC ACID	8	C3	III	8+N3	N	4	3			97	0.92	3	yes			no	PP, EP	0	34
2831	1,1,1-TRICHLOROETHANE	6.1	T1	III	6.1+N2	C	2	2	3	50	95	1.34	2	no			no	PP, EP, TOX, A	0	23
2850	PROPYLENE TETRAMER	3	F1	III	3+N1+F	N	4	3			97	0.76	2	yes			no	PP	0	
2874	FURFURYL ALCOHOL	6.1	T1	III	6.1+N3	C	2	2		25	95	1.13	2	no			no	PP, EP, TOX, A	0	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2904	PHENOLATES, LIQUID	8	C9	III	8	N	4	2			97	1,13-1,18	3	yes			no	PP, EP	0	34
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (2-PROPANOL AND DODECYLDIMETHYL-AMMONIUM CHLORIDE, AQUEOUS SOLUTION)	8	CF1	II	8+3+F	N	3	3			97	0.95	3	yes	T3	II A	yes	PP, EP, EX, A	1	34;
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (AQUEOUS SOLUTION OF HEXADECYLTRIMETHYL-AMMONIUM CHLORIDE (50%) AND ETHANOL (35%))	8	CF1	II	8+3+F	N	2	3		10	95	0.9	3	yes	T2 ¹²⁾	II B	yes	PP, EP, EX, A	1	6; +7 °C; 17; 34;
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (AQUEOUS SOLUTION OF HEXADECYLTRIMETHYL-AMMONIUM CHLORIDE (50%) AND ETHANOL (35%))	8	CF1	II	8+3+F	N	2	3		10	95	0.9	3	yes	T2 ¹²⁾	II B (II B3)	yes	PP, EP, EX, A	1	6; +7 °C; 17; 34; 44
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	CT1	I	8+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	CT1	II	8+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	CT1	III	8+6.1+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	0	27; *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	I	3+8+(N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	27; *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	I	3+8+(N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	27; 44 *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	I	3+8+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	27; *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	I	3+8+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	27; 44 *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	II	3+8+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	27; *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	II	3+8+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	27; 44 *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	III	3+8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	27; 34 *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2/ 3.2.3.1	1.2.1/ 7.2.2.0.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	1.2.1	1.2.1/ 3.2.3.3	1.2.1/ 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	III	3+8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	27; 34; 44 *see 3.2.3.3
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (AQUEOUS SOLUTION OF DIALKYL-(C ₈ -C ₁₈)- DIMETHYLAMMONIUM CHLORIDE AND 2-PROPANOL)	3	FC	II	3+8+F	C	2	2		50	95	0.88	2	yes	T2 ¹²⁾	II A	yes	PP, EP, EX, A	1	
2927	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	6.1	TC1	I	6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
2927	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	6.1	TC1	II	6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	TF1	I	6.1+3+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	TF1	I	6.1+3+(N 1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	TF1	II	6.1+3+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	TF1	II	6.1+3+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3
2935	ETHYL-2-CHLORO-PROPIONATE	3	F1	III	3	C	2	2		30	95	1.08	2	yes	T4 ³⁾	II A	yes	PP, EX, A	0	
2947	ISOPROPYL CHLOROACETATE	3	F1	III	3	C	2	2		30	95	1.09	2	yes	T4 ³⁾	II A	yes	PP, EX, A	0	
2966	THIOGLYCOL	6.1	T1	II	6.1	C	2	2		25	95	1.12	2	no			no	PP, EP, TOX, A	2	
2983	ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE, with not more than 30% ethylene oxide	3	FT1	I	3+6.1+unst. st.	C	1	1	3		95	0.85	1	no	T2 ¹²⁾	II B (II B3)	yes	PP, EP, EX, TOX, A	2	2; 3; 12; 31; 35
2984	HYDROGEN PEROXIDE AQUEOUS SOLUTION with not less than 8%, but less than 20% hydrogen peroxide (stabilized as necessary)	5.1	O1	III	5.1+unst.	C	2	2		35	95	1.06	2	yes			no	PP	0	3; 33
3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN, (ALKYLAMINE (C ₁₂ to C ₁₈))	9	M7	III	9+F	N	4	3	2		95	0.79	3	yes			no	PP	0	7; 17
3079	METHACRYLONITRILE, STABILIZED	6.1	TF1	I	6.1+3+unst. st.+ N3	C	2	2		45	95	0.8	1	no	T1 ¹²⁾	II A ⁹⁾	yes	PP, EP, EX, TOX, A	2	3; 5

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.4	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	M6	III	9+(N1, N2, CMR+ F or S)	*	*	*	*	*	*		*	yes			no	*	0	22; 27 *see 3.2.3.3
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BILGE WATER, FREE OF SLUDGE)	9	M6	III	9+N2+F	N	4	3			97		3	yes			no	PP	0	
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BILGE WATER, CONTAINS SLUDGE)	9	M6	III	9+CMR+ N1	N	2	3		10	97		2	yes			no	PP, EP, TOX, A	0	45
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OIL SLUDGE)	9	M6	III	9+CMR+ N1	N	2	3		10	97		2	yes			No	PP, EP, TOX, A	0	45
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE; LIQUID, N.O.S. (HEAVY HEATING OIL)	9	M6	III	9+CMR (N1, N2, F or S)	N	2	3		10	97		2	yes			no	PP	0	47
3092	1-METHOXY-2-PROPANOL	3	F1	III	3	N	3	2			97	0.92	3	yes	T3	II B (II B1)	yes	PP, EX, A	0	
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₇ -C ₁₂ homologues)	8	C3	II	8+N3	N	4	3			97	0.95	3	yes			no	PP, EP	0	27; 34
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C ₂ -C ₁₂ homologues)	8	C3	III	8+N3	N	4	3			97	0.95	3	yes			no	PP, EP	0	27; 34
3175	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S., MOLTEN, having a flash-point up to 60 °C (2-PROPANOL AND DIALKYL-(C ₁₂ to C ₁₈)-DIMETHYLAMMONIUM CHLORIDE)	4.1	F1	II	4.1	N	3	3	4		95	0.86	3	yes	T2 ¹²⁾	II A ⁷⁾	yes	PP, EX, A	1	7; 17

UN No. or substance identification No.	(1)	Name and description	(3a)	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
		(2)	(3b)	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	14	15	16	17	18	19	(20)
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point	F2	3	F2	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes	T4 3)	II B ⁴⁾	yes	*	0	7; 17; 27; *see 3.2.3.3
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point	F2	3	F2	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes	T4 3)	II B ⁴⁾ (II B3)	yes	*	0	7; 17; 27; 44 *see 3.2.3.3
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (PYROLYSIS OIL)	F2	3	F2	III	3+F	N	3	3	2		95		3	yes	T1 12)	II B	yes	PP, EX, A	0	7; 17
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (PYROLYSIS OIL A)	F2	3	F2	III	3+F	N	3	3	2		95		3	yes	T1 12)	II B	yes	PP, EX, A	0	7; 17
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (RESIDUAL OIL)	F2	3	F2	III	3+F	N	3	3	2		95		3	yes	T1 12)	II B	yes	PP, EX, A	0	7; 17
3256		ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (MIXTURE OF CRUDE NAPHTHALENE)	F2	3	F2	III	3+F	N	3	3	2		95		3	yes	T1 12)	II B	yes	PP, EX, A	0	7; 17

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (CREOSOTE OIL)	3	F2	III	3+N1+F	C	2	2	2	10	95		2	yes	T2 ¹²⁾	II B	yes	PP, EX, A	0	7; 17
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (Low QI Pitch)	3	F2	III	3+N2+C MR+S	N	3	1	4		95	1,1-1,3	3	yes	T2 ¹²⁾	II B (II B2)	yes	PP, EP, EX, TOX, A	0	7; 17
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	M9	III	9+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes			no	*	0	7; 17; 20; +115 °C; 22; 24; 25; 27 *see 3.2.3.3
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	M9	III	9+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes			no	*	0	7; 17; 20; +225 °C; 22; 24; 27 *see 3.2.3.3
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	M9	III	9+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes			no	*	0	7; 17; 20; +250 °C; 22; 24; 27 *see 3.2.3.3
3259	AMINES, SOLID, CORROSIVE, N.O.S. (MONOALKYL-(C ₁₂ to C ₁₈)-AMINE ACETATE, MOLTEN)	8	C8	III	8	N	4	3	2		95	0.87	3	yes			no	PP, EP	0	7; 17; 34
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	I	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	II	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	III	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (AQUEOUS SOLUTION OF PHOSPHORIC ACID AND NITRIC ACID)	8	C1	I	8	N	2	3		10	97		3	yes			no	PP, EP	0	34
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (AQUEOUS SOLUTION OF PHOSPHORIC ACID AND NITRIC ACID)	8	C1	II	8	N	4	3			97		3	yes			no	PP, EP	0	34
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (AQUEOUS SOLUTION OF PHOSPHORIC ACID AND NITRIC ACID)	8	C1	III	8	N	4	3			97		3	yes			no	PP, EP	0	34
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	I	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	II	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	III	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	I	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	II	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	III	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	I	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	II	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	III	8+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27; 34 *see 3.2.3.3
3271	ETHERS, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27; *see 3.2.3.3
3271	ETHERS, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
3271	ETHERS, N.O.S. (tert- AMYL- METHYL ETHER)	3	F1	II	3+N1	C	2	2	3	50	95	0.77	2	yes	T2 ¹²⁾	II B ⁴⁾	yes	PP, EX, A	1	

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2/ 3.2.3.1	1.2.1/ 7.2.2.0.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1/ 1.2.1	3.2.3.1/ 1.2.1	1.2.1	1.2.1/ 3.2.3.3	1.2.1/ 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3271	ETHERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27; *see 3.2.3.3
3271	ETHERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 27; 44 *see 3.2.3.3
3272	ESTERS, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T2 ¹²⁾	II B ⁴⁾	yes	*	1	14; 27; *see 3.2.3.3
3272	ESTERS, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T2 ¹²⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
3272	ESTERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27; *see 3.2.3.3
3272	ESTERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	14; 27; 44 *see 3.2.3.3
3276	NITRILES, TOXIC LIQUID, N.O.S. (2-METHYLGLUTARONITRILE)	6.1	T1	II	6.1	C	2	2		10	95	0.95	2	no			no	PP, EP, TOX, A	2	
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	I	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	I	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	I	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	I	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	II	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	27; *see 3.2.3.3
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	FTC	II	3+6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	27; 44 *see 3.2.3.3
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1	T4	I	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1	T4	II	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1	T4	III	6.1+(N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	0	27; *see 3.2.3.3
3287	TOXIC LIQUID, INORGANIC, N.O.S. (SODIUM DICHROMATE SOLUTION)	6.1	T4	III	6.1+CMR	C	2	2		30	95	1.68	2	no			no	PP, EP, TOX, A	0	
3289	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. BOILING POINT > 115 °C	6.1	TC3	I	6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		1	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
3289	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. BOILING POINT > 115 °C	6.1	TC3	II	6.1+8+ (N1, N2, N3, CMR, F or S)	C	2	2	*	*	95		2	no			no	PP, EP, TOX, A	2	27; *see 3.2.3.3
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27 *see 3.2.3.3
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	I	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	1	14; 27 *see 3.2.3.3
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	II	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	1	14; 27; 44 *see 3.2.3.3
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	14; 27 *see 3.2.3.3

UN No. or substance identification No.	(1)	Name and description	(2)	Class	(3a)	Classification code	Packing group	Dangers	(5)	Type of tank vessel	(6)	Cargo tank design	Cargo tank type	(8)	Cargo tank equipment	(10)	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	(11)	Relative density at 20 °C	(12)	Type of sampling device	(13)	Pump room below deck permitted	(14)	Temperature class	(15)	Explosion group	(16)	Anti-explosion protection required	(17)	Equipment required	(18)	Number of cones/blue lights	(19)	Additional requirements/Remarks	(20)
			3.1.2	2.2	2.2	2.1.1.3	I	5.2.2 / 3.2.3.1	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	yes	3.2.3.1 / 1.2.1	1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5				
3295		HYDROCARBONS, LIQUID, N.O.S.		3	F1	F1	III	3+(N1, N2, N3, CMR, F)	3+(N1, N2, N3, CMR, F)	*	*	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾ (II B3)	II B ⁴⁾ (II B3)	*	0		*		14; 27; 44 *see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	F1	I	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾	II B ⁴⁾	*	1		*		*see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	F1	I	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾ (II B3)	II B ⁴⁾ (II B3)	*	1		*		44 *see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	F1	II	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾ (II B3)	II B ⁴⁾ (II B3)	*	1		*		*see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	F1	III	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾	II B ⁴⁾	*	0		*		*see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE		3	F1	F1	III	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	*	*	*	*	*	*	*	*	*	*	*	yes	yes	T4 ³⁾	II B ⁴⁾ (II B3)	II B ⁴⁾ (II B3)	*	0		*		44 *see 3.2.3.3			
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C		3	F1	F1	I	3+CMR+ (N1, N2, N3, F)	3+CMR+ (N1, N2, N3, F)	C	C	1	1	1	1	1	1	95			1	1	yes	yes	T4 ³⁾	II B ⁴⁾	II B ⁴⁾	PP, EP, EX, TOX, A	1		PP, EP, EX, TOX, A					
3295		HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C		3	F1	F1	I	3+CMR+ (N1, N2, N3)	3+CMR+ (N1, N2, N3)	C	C	1	1	1	1	1	1	95			1	1	yes	yes	T4 ³⁾	II B ⁴⁾ (II B3)	II B ⁴⁾ (II B3)	PP, EP, EX, TOX, A	1		PP, EP, EX, TOX, A		44			

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	II	3+CMR+ (N1, N2, N3, F)	C	I	I	I		95		1	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	II	3+CMR+ (N1, N2, N3)	C	I	I	I		95		1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	III	3+CMR+ (N1, N2, N3, F)	C	I	I	I		95		1	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT ≤ 60 °C	3	F1	III	3+CMR+ (N1, N2, N3)	C	I	I	I		95		1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	II	3+CMR+ (N1, N2, N3, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	23; 38
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	II	3+CMR+ (N1, N2, N3)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	23; 38; 44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	III	3+CMR+ (N1, N2, N3, F)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	23; 38
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 60 °C < INITIAL BOILING POINT ≤ 85 °C	3	F1	III	3+CMR+ (N1, N2, N3)	C	2	2	3	50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	23; 38; 44

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	II	3+CMR+ (N1, N2, N3, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	II	3+CMR+ (N1, N2, N3)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	III	3+CMR+ (N1, N2, N3, F)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE 85 °C < INITIAL BOILING POINT ≤ 115 °C	3	F1	III	3+CMR+ (N1, N2, N3)	C	2	2		50	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115°C	3	F1	II	3+CMR+ (N1, N2, N3, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115°C	3	F1	II	3+CMR+ (N1, N2, N3)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	44
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115 °C	3	F1	III	3+CMR+ (N1, N2, N3, F)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	
3295	HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE INITIAL BOILING POINT > 115°C	3	F1	III	3+CMR+ (N1, N2, N3)	C	2	2		35	95		2	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	44

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3295	HYDROCARBONS, LIQUID, N.O.S. CONTAINING ISOPRENE AND PENTADIENE, STABILIZED	3	F1	I	3+unst.+ N2+CMR	C	2	2	3	50	95	0,678	1	yes	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	3
3295	HYDROCARBONS, LIQUID, N.O.S. CONTAINING ISOPRENE AND PENTADIENE, STABILIZED	3	F1	I	3+unst.+ N2+CMR	C	2	2	3	50	95	0,678	1	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	1	3; 44
3295	HYDROCARBONS, LIQUID, N.O.S. (1-OCTEN)	3	F1	II	3+N2+F	N	2	3		10	97	0,71	2	yes	T3	II B ⁴⁾	yes	PP, EP, EX, A	1	14
3295	HYDROCARBONS, LIQUID, N.O.S. (POLYCYCLIC AROMATIC HYDROCARBONS MIXTURE)	3	F1	III	3+CMR+F	N	2	3	3	10	97	1,08	2	yes	T1 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	0	14
3412	FORMIC ACID with not less than 10% but not more than 85% acid by mass	8	C3	II	8+N3	N	2	3		10	97	1,22	3	yes	T1 ¹²⁾	II A	yes	PP, EP, EX, A	0	6; +12 °C; 17; 34
3412	FORMIC ACID with not less than 5% but less than 10% acid by mass	8	C3	III	8	N	2	3		10	97	1,22	3	yes	T1 ¹²⁾	II A	yes	PP, EP, EX, A	0	6; +12 °C; 17; 34
3426	ACRYLAMIDE, SOLUTION	6.1	T1	III	6.1	C	2	2		30	95	1,03	2	no			no	PP, EP, TOX, A	0	3; 5; 16
3429	CHLOROTOLUIDINES, LIQUID	6.1	T1	III	6.1+S	C	2	2		25	95	1,15	2	no	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, TOX, A	0	6; +6 °C; 17
3446	NITROTOLUENES, SOLID, MOLTEN (p-NITROTOLUENE)	6.1	T2	II	6.1+N2+S	C	2	2	2	25	95	1,16	2	no	T2 ¹²⁾	II B (II B3 ¹⁴⁾)	yes	PP, EP, EX, TOX, A	2	7; 17
3446	NITROTOLUENES, SOLID, MOLTEN (p-NITROTOLUENE)	6.1	T2	II	6.1+N2+S	C	2	1	4	25	95	1,16	2	no			no	PP, EP, TOX, A	2	7; 17; 20; +88 °C; 26
3451	TOLUIDINES, SOLID, MOLTEN (p-TOLUIDINE)	6.1	T2	II	6.1+N1	C	2	2	2	25	95	1,05	2	no	T1 ¹²⁾	II A ⁸⁾	yes	PP, EP, EX, TOX, A	2	7; 17

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3451	TOLUIDINES, SOLID, MOLTEN (p-TOLUIDINE)	6.1	T2	II	6.1+N1	C	2	2	4	25	95	1.05	2	no			no	PP, EP, TOX, A	2	7; 17; 20; +60 °C
3455	CRESOLS, SOLID, MOLTEN	6.1	TC2	II	6.1+8+N3	C	2	2	2	25	95	1.03 - 1.05	2	no	T1 ¹²⁾	II A ⁸⁾	yes	PP, EP, EX, TOX, A	2	7; 17
3455	CRESOLS, SOLID, MOLTEN	6.1	TC2	II	6.1+8+N3	C	2	2	4	25	95	1.03 - 1.05	2	no			no	PP, EP, TOX, A	2	7; 17; 20; +66 °C
3463	PROPIONIC ACID with not less than 90% acid by mass	8	CF1	II	8+3+N3	N	3	3			97	0.99	3	yes	T1 ¹²⁾	II A ⁷⁾	yes	PP, EP, EX, A	1	34
3475	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 10% but not more than 90% ethanol	3	F1	II	3+N2+C MR+F	N	2	3	3	10	97	0.69 - 0.78 ¹⁰⁾	2	yes	T3	II A	yes	PP, EP, EX, TOX, A	1	
3475	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 90% ethanol	3	F1	II	3+N2+C MR+F	N	2	3	3	10	97	0.78 - 0.79 ¹⁰⁾	2	yes	T2 ¹²⁾	II B (II B1)	yes	PP, EP, EX, TOX, A	1	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	I	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	14 *see 3.2.3.3
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	I	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		1	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	14; 44 *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	2	no	1.2.1	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	II	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	2	14 *see 3.2.3.3
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	II	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	2	14; 44 * see 3.2.3.3
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	III	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		2	no	T4 ³⁾	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	14 *see 3.2.3.3
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	III	3+6.1+(N1, N2, N3, CMR, F)	C	*	*	*	*	95		2	no	T4 ³⁾	II B ⁴⁾ (II B3)	yes	PP, EP, EX, TOX, A	0	14; 44 * see 3.2.3.3
9000	AMMONIA, DEEPLY REFRIGERATED	2	3TC		2.1+2.3+8+N1	G	1	1	1; 3		95		1	no	T1 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	1; 2; 31
9000	AMMONIA, ANHYDROUS, DEEPLY REFRIGERATED	2	3TC		2.1+2.3+8+N1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	1; 2; 31
9001	SUBSTANCE WITH A FLASHPOINT ABOVE 60 °C, HEATED within a range of 15 K below the flashpoint	3	F4		3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾	yes	*	0	27 *see 3.2.3.3
9001	SUBSTANCE WITH A FLASHPOINT ABOVE 60 °C, HEATED within a range of 15 K below the flashpoint	3	F4		3+(N1, N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes	T4 ³⁾	II B ⁴⁾ (II B3)	yes	*	0	27; 44 *see 3.2.3.3

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
9002	SUBSTANCES HAVING A SELF-IGNITION TEMPERATURE ≤ 200 °C, N.O.S.	3	F5		3+(N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	yes	T4	II B ⁴⁾	yes	*	0	27 *see 3.2.3.3
9002	SUBSTANCES HAVING A SELF-IGNITION TEMPERATURE ≤ 200 °C, N.O.S.	3	F5		3+(N1, N2, N3, CMR, F or S)	C	1	1	*	*	95		1	yes	T4	II B ⁴⁾ (II B3)	yes	*	0	27; 44 *see 3.2.3.3
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C which are not affected to another class	9	M12		9+(N2, N3, CMR, F or S)	*	*	*	*	*	*		*	yes			no	*	0	27 *see 3.2.3.3
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C which are not affected to another class (ETHYLENE GLYCOL MONOBUTYL ETHER)	9	M12		9+N3+F	N	4	3			97	0.9	3	yes			no	pp	0	
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C which are not affected to another class (2-ETHYLHEXYLACRYLATE)	9	M12		9+N3+F	N	4	3			97	0.89	3	yes			no	pp	0	3; 5; 16;

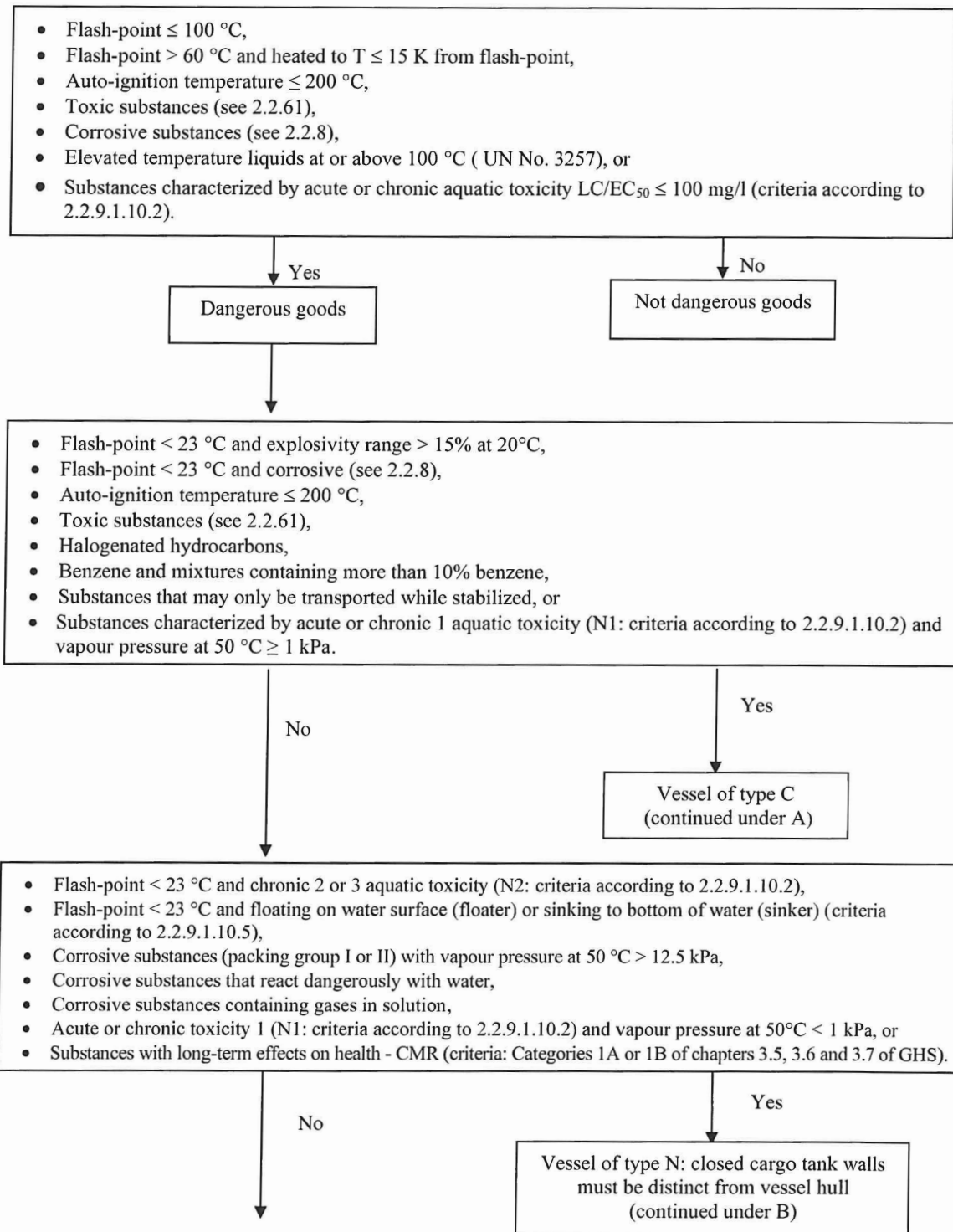
UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve, in kPa	Maximum degree of filling of the cargo tank in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
		(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
9004	DIPHENYLMETHANE-4,4'-DIISOCYANATE	9	M12		9+S	N	2	3	4	10	95	1.21 ¹¹⁾	3	yes			no	PP	0	7; 8; 17; 19
9005	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN	9	M12		9+(N2, N3, CMR, F or S)	*	*	*	*	*	95		*	yes			no	*	0	27 *see 3.2.3.3
9006	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	M12		9+(N2, N3, CMR, F or S)	*	*	*	*	*	97		*	yes			no	*	0	27 *see 3.2.3.3

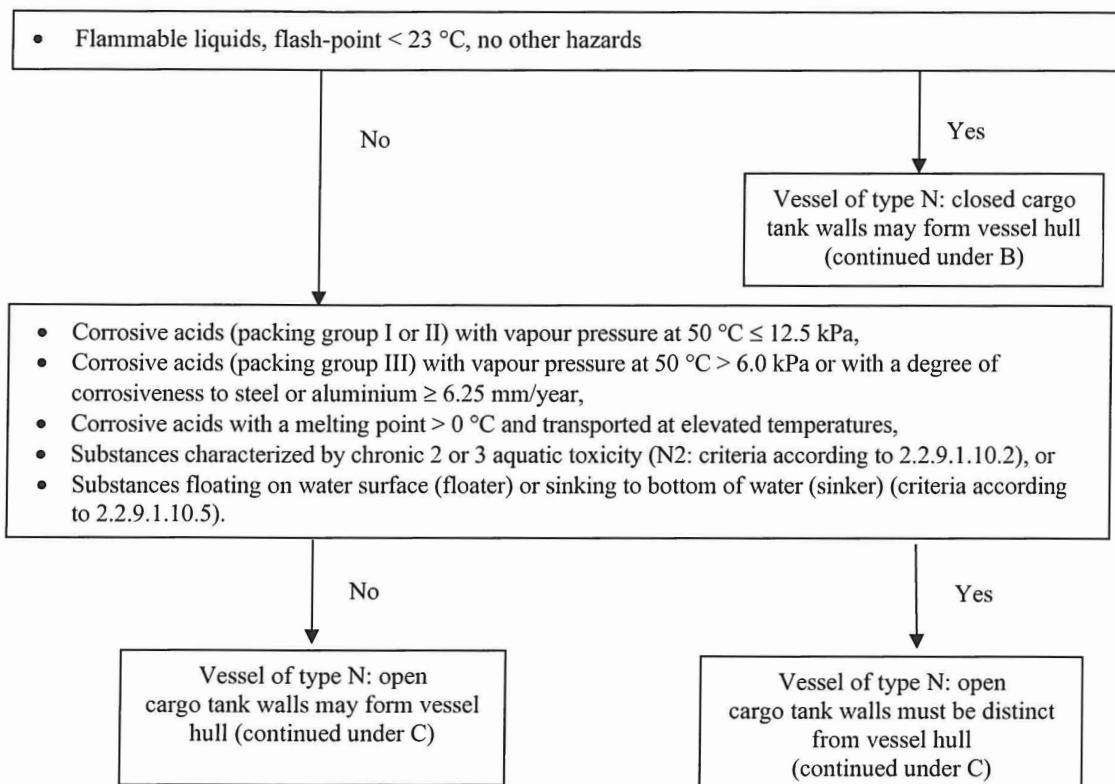
Notes related to Table C

- 1) The ignition temperature has not been determined in accordance with a standardized determination procedure; therefore, provisional assignment has been made to temperature class T2 which is considered safe.
- 2) The ignition temperature has not been determined in accordance with a standardized determination procedure; therefore, provisional assignment has been made to temperature class T3 which is considered safe.
- 3) The ignition temperature has not been determined in accordance with a standardized determination procedure; therefore, provisional assignment has been made to temperature class T4 which is considered safe.
- 4) The maximum experimental safe gap (MESG) has not been measured in accordance with a standardized determination procedure; therefore, assignment has been made to explosion group II B which is considered safe.
- 5) The maximum experimental safe gap (MESG) has not been measured in accordance with a standardized determination procedure; therefore, assignment has been made to explosion group II C which is considered safe.
- 6) *(Deleted)*
- 7) The maximum experimental safe gap (MESG) has not been measured in accordance with a standardized determination procedure; therefore, assignment has been made to the explosion group which is considered safe.
- 8) The maximum experimental safe gap (MESG) has not been measured in accordance with a standardized determination procedure; therefore, assignment has been made to the explosion group in compliance with IEC 60079-20-1.
- 9) Assignment in accordance with IMO IBC Code.
- 10) Relative density at 15 °C.
- 11) Relative density at 25 °C.
- 12) This temperature class does not apply for the selection of explosion protected installations and equipment. The surface temperature of explosion protected installations and equipment shall not exceed 200 °C.
- 13) *(Deleted)*
- 14) No maximum experimental safe gap (MESG) has been determined in accordance with a standardized determination procedure; thus, the substance is provisionally assigned to explosion group II B3, which is considered to be safe.

3.2.3.3 *Flowchart, schemes and criteria for determining applicable special requirements (columns (6) to (20) of Table C)*

Flowchart for classification of liquids of Classes 3, 6.1, 8 and 9 for carriage in tanks in inland navigation





Elevated temperature substances

Irrespective of the above classifications, for substances that must be transported at elevated temperatures, the type of cargo tank shall be determined on the basis of the transport temperature, using the following table:

Maximum transport temperature T in °C	Type N	Type C
$T \leq 80$	Integral cargo tank	Integral cargo tank
$80 < T \leq 115$	Independent cargo tank, remark 25	Independent cargo tank, remark 26
$T > 115$	Independent cargo tank	Independent cargo tank

Remark 25 = remark No. 25 in column (20) of the list of substances contained in Chapter 3.2, Table C.

Remark 26 = remark No. 26 in column (20) of the list of substances contained in Chapter 3.2, Table C.

Scheme A: Criteria for cargo tank equipment in vessels of type C

Ascertain which substance/cargo tank characteristics in the first three columns are relevant. Select the applicable row in the relevant column. The cargo tank equipment requirements for C-vessels are then described in this row in the fourth column.

Substance/cargo tank characteristics			Requirements arising
Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C > 50 kPa	Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C ≤ 50 kPa	Cargo tank internal pressure unknown, owing to absence of certain data	Cargo tank equipment
Refrigerated			With refrigeration (No. 1 in column (9))
Non-refrigerated	Cargo tank internal pressure at 50 °C > 50 kPa without water spraying	Boiling point ≤ 60 °C	Pressure tank (400 kPa)
	Cargo tank internal pressure at 50 °C > 50 kPa with water spraying	60 °C < boiling point ≤ 85 °C	Pressure relief valve/high velocity vent valve opening pressure: 50 kPa, with water-spraying system (No. 3 in column (9))
	Cargo tank internal pressure at 50 °C ≤ 50 kPa		Pressure relief valve/high velocity vent valve opening pressure as calculated, but at least 10 kPa
		85 °C < boiling point ≤ 115 °C	Pressure relief valve/high velocity vent valve opening pressure: 50 kPa
		Boiling point > 115 °C	Pressure relief valve/high velocity vent valve opening pressure: 35 kPa

Scheme B: Criteria for equipment of vessels of type N with closed cargo tanks

Ascertain which substance/cargo tank characteristics in the first six columns are relevant. Select the applicable row in the relevant column. The cargo tank equipment requirements for N-vessels with closed cargo tanks are then described in this row in the seventh column. If multiple columns are relevant select the topmost relevant row in the seventh column.

Substance/cargo tank characteristics						Requirements arising
Class 3, flash-point < 23 °C						CMR substances
						Corrosive substances
175 kPa ≤ P _{v 50} < 300 kPa without refrigeration						Pressure tank (400 kPa)
175 kPa ≤ P _{v 50} < 300 kPa with refrigeration						Pressure relief valve/high velocity vent valve opening pressure: 50 kPa (with refrigeration (No. 1 in column (9)))
	150 kPa ≤ P _{v 50} < 175 kPa	110 kPa ≤ P _{v 50} < 150 kPa without water spraying				Pressure relief valve/high velocity vent valve opening pressure: 50 kPa
		110 kPa ≤ P _{v 50} < 150 kPa with water spraying				Pressure relief valve/high velocity vent valve opening pressure: 10 kPa (with water spraying (No. 3 in column (9)))
						Pressure relief valve/high velocity vent valve opening pressure: 10 kPa

Scheme C: Criteria for equipment of vessels of type N with open cargo tanks

As certain which substance/characteristics in the first three columns are relevant. Select the applicable row in the relevant column. The cargo tank equipment requirements for N-vessels with open cargo tanks are then described in this row in the fourth column.

Substance characteristics			Requirements arising
Classes 3 and 9	Flammable substances	Corrosive substances	Cargo tank equipment
$23\text{ }^{\circ}\text{C} \leq \text{flash-point} \leq 60\text{ }^{\circ}\text{C}$	Flash-point $> 60\text{ }^{\circ}\text{C}$ carried while heated to $\leq 15\text{ K}$ below flash-point or Flash-point $> 60\text{ }^{\circ}\text{C}$, at or above their flash-point	Acids, transported while heated or flammable substances	With flame-arrester
$60\text{ }^{\circ}\text{C} < \text{flash-point} \leq 100\text{ }^{\circ}\text{C}$ or elevated temperature substances of Class 9		Non-flammable substances	Without flame-arrester

Column (9): Cargo tank equipment for substances transported in a molten state– **Possibility of heating the cargo (number 2 in column (9))**

A possibility of heating the cargo shall be required on board:

- When the melting point of the substance to be transported is + 15 °C or greater,
or
- When the melting point of the substance to be transported is greater than 0 °C but less than + 15 °C and the outside temperature is no more than 4 K above the melting point. In column (20), reference shall be made to remark 6 with the temperature derived as follows: melting point + 4 K

– **Heating system on board (number 4 in column (9))**

A cargo heating system shall be required on board:

- For substances that must not be allowed to solidify owing to the possibility of dangerous reactions on reheating, and
- For substances that must be maintained at a guaranteed temperature not less than 15 K below their flash-point

Column (10): Determination of opening pressure of high-velocity vent valve in kPa

For vessels of type C, the opening pressure of the high-velocity vent valve shall be determined on the basis of the internal pressure of the tanks, rounded up to the nearest 5 kPa

To calculate the internal pressure, the following formula shall be used:

$$P_{\max} = P_{Ob\max} + \frac{k \cdot v_a (P_0 - P_{Da})}{v_a - \alpha \cdot \delta_t + \alpha \cdot \delta_t \cdot v_a} - P_0$$

$$k = \frac{T_{D\max}}{T_a}$$

In this formula:

- $P_{\max}$: Maximum internal pressure in kPa
- $P_{Ob\max}$: Absolute vapour pressure at maximum liquid surface temperature in kPa
- P_{Da} : Absolute vapour pressure at filling temperature in kPa
- P_0 : Atmospheric pressure in kPa
- v_a : Free relative volume at filling temperature compared with cargo tank volume
- α : Cubic expansion coefficient in K⁻¹
- δ_t : Average temperature increase of the liquid due to heating in K
- $T_{D\max}$: Maximum gaseous phase temperature in K
- T_a : Filling temperature in K
- k : Temperature correction factor
- t_{ob} : Maximum liquid surface temperature in °C

In the formula, the following basic data are used:

P_{Obmax} : At 50 °C and 30 °C

P_{Da} : At 15 °C

P_0 : 101.3 kPa

v_a : 5% = 0.05

δ_t : 5 K

T_{Dmax} : 323 K and 310.8 K

T_a : 288 K

t_{Ob} : 50 °C and 30 °C

Column (11): Determination of maximum degree of filling of cargo tanks

If, in accordance with the provisions under A above:

- Type G is required: 91%; however, in the case of deeply refrigerated substances: 95%
- Type C is required: 95%
- Type N is required: 97%; however, in the case of substances in a molten state and of flammable liquids with $175 \text{ kPa} \leq P_{v50} < 300 \text{ kPa}$: 95%

Column (12): Relative density of substance at 20 °C

These data are provided for information only.

Column (13): Determination of type of sampling device

- | | |
|-----------------------------|---|
| $1 = \text{closed:}$ | <ul style="list-style-type: none"> – Substances to be transported in pressure cargo tanks and in membrane tanks – Substances with danger 6.1 in column (5) and assigned to packing group I – Stabilized substances to be transported under inert gas |
| $2 = \text{partly closed:}$ | <ul style="list-style-type: none"> – All other substances for which type C or substances with CMR properties for which type N with closed cargo tanks is required – Substances with danger CMR in column (5) and for which no closed sampling is required |
| $3 = \text{open:}$ | <ul style="list-style-type: none"> – All other substances |

Column (14): Determination of whether a pump room is permitted below deck

- | | |
|-----|--|
| No | <ul style="list-style-type: none"> – All substances with T in column (3b) with the exception of substances of Class 2 |
| Yes | <ul style="list-style-type: none"> – All other substances |

Column (15): Determination of temperature class

Flammable substances shall be assigned to a temperature class on the basis of their auto-ignition point:

Temperature class	Auto-ignition temperature T of flammable liquids and gases in °C
T1	$T > 450$
T2	$300 < T \leq 450$
T3	$200 < T \leq 300$
T4	$135 < T \leq 200$
T5	$100 < T \leq 135$
T6	$85 < T \leq 100$

When anti-explosion protection is required and the auto-ignition temperature is not known, reference shall be made to temperature class T4, considered safe.

Column (16): Determination of explosion group

Flammable substances shall be assigned to an explosion group on the basis of their maximum experimental safe gaps.

The maximum experimental safe gaps shall be determined in accordance with standard IEC 60079-20-1.

The different explosion groups are as follows:

Explosion group	Maximum experimental safe gap in mm
II A	> 0.9
II B	≥ 0.5 to ≤ 0.9
II C	< 0.5

Where self-contained protection systems are in place, the different subgroups for explosion group II B are as follows:

Explosion group/subgroup	Maximum experimental safe gap in mm
II B1	> 0.85 to ≤ 0.9
II B2	> 0.75 to ≤ 0.85
II B3	> 0.65 to ≤ 0.75
II B	≥ 0.5 to ≤ 0.65

When anti-explosion protection is required and the relevant data are not provided, reference shall be made to explosion group II B, considered safe.

Column (17): Determination of whether anti-explosion protection is required

- | | |
|-----|--|
| Yes | <ul style="list-style-type: none"> – For substances with a flash-point ≤ 60 °C – For substances that must be transported while heated to a temperature of less than 15 °C below their flash-point – For substances that must be transported while heated to a temperature of 15 °C or more below their flash-point and where in column (9) (cargo tank equipment) only a possibility of cargo heating (2) and no cargo-heating system on board (4) is required – For flammable gases |
| No | <ul style="list-style-type: none"> – For all other substances |

Column (18): Determination of whether personal protective equipment, escape devices, portable gas detectors, portable toximeters or ambient-air-dependent breathing apparatus is required

- PP: For all substances of Classes 1 to 9;
- EP: For all substances
 - of Class 2 with letter T or letter C in the classification code indicated in column (3b),
 - of Class 3 with letter T or letter C in the classification code indicated in column (3b),
 - of Class 4.1,
 - of Class 6.1, and
 - of Class 8,
 - CMR substances of Category 1A or 1B according to chapters 3.5, 3.6 and 3.7 of GHS;
- EX: For all substances for which anti-explosion protection is required;
- TOX: For all substances of Class 6.1,

For all substances of other classes with T in column (3b),

For CMR substances of Category 1A or 1B according to chapters 3.5, 3.6 and 3.7 of GHS;
- A: For all substances for which EX or TOX is required

Column (19): Determination of the number of cones or blue lights

For all substances of Class 2 with letter F in the classification code indicated in column (3b):	1 cone/light
For all substances of Classes 3 to 9 with letter F in the classification code indicated in column (3b) and assigned to packing group I or II:	1 cone/light
For all substances of Class 2 with letter T in the classification code indicated in column (3b)	2 cones/lights
For all substances of Classes 3 to 9 with letter T in the classification code indicated in column (3b) and assigned to packing group I or II:	2 cones/lights

Column (20): Determination of additional requirements and remarks

- Remark 1:** Reference shall be made in column (20) to remark 1 for transport of UN No. 1005 AMMONIA, ANHYDROUS.
- Remark 2:** Reference shall be made in column (20) to remark 2 for stabilized substances that react with oxygen and for gases for which danger 2.1 is mentioned in column 5.
- Remark 3:** Reference shall be made in column (20) to remark 3 for substances that must be stabilized.
- Remark 4:** Reference shall be made in column (20) to remark 4 for substances that must not be allowed to solidify owing to the possibility of dangerous reactions on reheating.
- Remark 5:** Reference shall be made in column (20) to remark 5 for substances liable to polymerization.
- Remark 6:** Reference shall be made in column (20) to remark 6 for substances liable to crystallization and for substances for which a heating system or possibility of heating is required and the vapour pressure of which at 20 °C is greater than 0.1 kPa.

- Remark 7:** Reference shall be made in column (20) to remark 7 for substances with a melting point of + 15 °C or greater.
- Remark 8:** Reference shall be made in column (20) to remark 8 for substances that react dangerously with water.
- Remark 9:** Reference shall be made in column (20) to remark 9 for transport of UN No. 1131 CARBON DISULPHIDE.
- Remark 10:** *No longer used.*
- Remark 11:** Reference shall be made in column (20) to remark 11 for transport of UN No. 1040 ETHYLENE OXIDE WITH NITROGEN.
- Remark 12:** Reference shall be made in column (20) to remark 12 for transport of UN No. 1280 PROPYLENE OXIDE and UN No. 2983 ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE.
- Remark 13:** Reference shall be made in column (20) to remark 13 for transport of UN No. 1086 VINYL CHLORIDE, STABILIZED.
- Remark 14:** Reference shall be made in column (20) to remark 14 for mixtures or N.O.S. entries which are not clearly defined and for which type N is stipulated under the classification criteria.
- Remark 15:** Reference shall be made in column (20) to remark 15 for substances that react dangerously with alkalis or acids such as sodium hydroxide or sulphuric acid.
- Remark 16:** Reference shall be made in column (20) to remark 16 for substances that may react dangerously to local overheating.
- Remark 17:** Reference shall be made in column (20) to remark 17 for substances when reference is made to remark 4, 6 or 7.
- Remark 18:** *No longer used.*
- Remark 19:** Reference shall be made in column (20) to remark 19 for substances that must under no circumstances come into contact with water.
- Remark 20:** Reference shall be made in column (20) to remark 20 for substances the transport temperature of which must not exceed a maximum temperature in combination with the cargo tank materials. Reference shall be made to this maximum permitted temperature immediately after the number 20.
- Remark 21:** *No longer used.*
- Remark 22:** Reference shall be made in column (20) to remark 22 for substances for which a range of values or no value of the density is indicated in column (12).
- Remark 23:** Reference shall be made in column (20) to remark 23 for substances the internal pressure of which at 30 °C is less than 50 kPa and which are transported with water spraying.
- Remark 24:** Reference shall be made in column (20) to remark 24 for transport of UN No. 3257 ELEVATED TEMPERATURE LIQUID, N.O.S.
- Remark 25:** Reference shall be made in column (20) to remark 25 for substances that must be transported while heated in a type 3 cargo tank.

- Remark 26:** Reference shall be made in column (20) to remark 26 for substances that must be transported while heated in a type 2 cargo tank.
- Remark 27:** Reference shall be made in column (20) to remark 27 for substances for which the reference N.O.S. or a generic reference is made in column (2) and for which the proper shipping names are not already supplemented with the technical name of the goods or additional information concerning the benzene content.
- Remark 28:** Reference shall be made in column (20) to remark 28 for transport of UN No. 2448 SULPHUR, MOLTEN.
- Remark 29:** *No longer used.*
- Remark 30:** Reference shall be made in column (20) to remark 30 for transport of UN Nos. 1719, 1794, 1814, 1819, 1824, 1829, 1830, 1832, 1833, 1906, 2240, 2308, 2583, 2584, 2677, 2679, 2681, 2796, 2797, 2837 and 3320 under the entries for which open type N is required.
- Remark 31:** Reference shall be made in column (20) to remark 31 for transport of substances of Class 2 and UN Nos. 1280 PROPYLENE OXIDE and 2983 ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE of Class 3.
- Remark 32:** Reference shall be made in column (20) to remark 32 for transport of UN No. 2448 SULPHUR, MOLTEN of Class 4.1.
- Remark 33:** Reference shall be made in column (20) to remark 33 for transport of UN Nos. 2014 and 2984 HYDROGEN PEROXIDE, AQUEOUS SOLUTION of Class 5.1.
- Remark 34:** Reference shall be made in column (20) to remark 34 for transport of substances for which hazard 8 is mentioned in column (5) and type N in column (6).
- Remark 35:** Reference shall be made in column (20) to remark 35 for substances for which complete refrigeration may cause dangerous reactions in the event of compression. This is also applicable if the refrigeration is partly done by compression.
- Remark 36:** *No longer used.*
- Remark 37:** Reference shall be made in column (20) to remark 37 for substances for which the cargo storage system must be capable of resisting the full vapour pressure of the cargo at the upper limits of the ambient design temperatures, whatever the system adopted for the boil-off gas.
- Remark 38:** Reference shall be made in column (20) to remark 38 for mixtures with an initial boiling point above 60 °C or under or equal to 85 °C in accordance with ASTM D 86-01.
- Remark 39:** Reference shall be made in column (20) to remark 39 for the carriage of UN No. 1977 NITROGEN, REFRIGERATED, LIQUID and UN No. 2187 CARBON DIOXIDE, REFRIGERATED LIQUID of Class 2.
- Remark 40:** *No longer used.*
- Remark 41:** Reference shall be made in column (20) to remark 41 for UN No. 2709 BUTYLBENZENES (n-BUTYLBENZENE).
- Remark 42:** Reference shall be made in column (20) to remark 42 for UN No. 1038 ETHYLENE, REFRIGERATED LIQUID, for UN No. 1972 METHANE REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID, with high methane content, for UN No. 1977 NITROGEN, REFRIGERATED, LIQUID and for UN No. 2187, CARBON DIOXIDE, REFRIGERATED LIQUID.

- Remark 43:** Reference shall be made in column (20) to remark 43 for all packing group I entries with letter F (flammable) in the classification code indicated in column (3b), and with letter F (floaters) in column (5), Dangers.
- Remark 44:** (Reserved)
- Remark 45:** (Reserved)
- Remark 46:** Reference shall be made in column (20) to remark 46 for the carriage of UN No. 1977 NITROGEN, REFRIGERATED, LIQUID of Class 2.
- Remark 47:** Reference shall be made in column (20) to remark 47 for UN No. 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE; LIQUID, N.O.S. (HEAVY HEATING OIL).

3.2.4 Modalities for the application of section 1.5.2 on special authorizations concerning transport in tank vessels**3.2.4.1 Model special authorization under section 1.5.2****Special authorization
under 1.5.2 of ADN**

Under 1.5.2 of ADN, the transport in tank vessels of the substance specified in the annex to this special authorization shall be authorized in the conditions referred to therein.

Before transporting the substance, the carrier shall be required to have it added to the list referred to in 1.16.1.2.5 of ADN by a recognized classification society.

This special authorization shall be valid
(places and/or routes of validity)

It shall be valid for two years from the date of signature, unless it is repealed at an earlier date.

Issuing State:

Competent authority:

Date:

Signature:

3.2.4.2 Application form for special authorizations under section 1.5.2

For applications for special authorizations, please answer the following questions and points.* Data are used for administrative purposes only and are treated confidentially.

Applicant

.....
(Name) (Company)

.....
()

.....
(Address)

Summary of the application

Authorization for transport in tank vessels of as a substance of Class
.....

Annexes
(with brief description)**Application made:**

At:

Date:

Signature:

(of the person responsible for the data)

* For questions not relevant to the subject of the application, write "not applicable".

1. General data on the dangerous substance

- 1.1 Is it a pure substance ☐, a mixture ☐, a solution ☐ ?
- 1.2 Technical name (if possible ADN nomenclature or possibly the IBC Code).
- 1.3 Synonym.
- 1.4 Trade name.
- 1.5 Structure formula and, for mixtures, composition and/or concentration.
- 1.6 Hazard class and, where applicable classification code, packing group.
- 1.7 UN No. or substance identification number (if known).

2. Physico-chemical properties

- 2.1 State during transport (e.g. gas, liquid, molten, ...).
- 2.2 Relative density of liquid at 20 °C or at the transport temperature if the substance is to be heated or refrigerated during transport.
- 2.3 Transport temperature (for substances heated or refrigerated during transport).
- 2.4 Melting point or range °C.
- 2.5 Boiling point or range °C.
- 2.6 Vapour pressure at 15 °C, 20 °C, 30 °C, 37.8 °C, 50 °C, (for liquefied gases, vapour pressure at 70 °C, (for permanent gases, filling pressure at 15 °C).
- 2.7 Cubic expansion coefficient K⁻¹
- 2.8 Solubility in water at 20 °C
Saturation concentration mg/l
or
Miscibility with water at 15 °C
☐ Complete ☐ partial ☐ none
(If possible, in the case of solutions and mixtures, indicate concentration)
- 2.9 Colour.
- 2.10 Odour.
- 2.11 Viscosity mm²/s.
- 2.12 Flow time (ISO 2431:2019)s.
- 2.13 Solvent separation test
- 2.14 pH of the substance or aqueous solution (indicate concentration).
- 2.15 Other information.

3. Technical safety properties

3.1 Auto-ignition temperature in accordance with IEC 60079-20-1:2010, EN 14522:2005, DIN 51 794:2003 in °C; where applicable, indicate the temperature class in accordance with IEC 60079-20-1:2010.

3.2 Flash-point

For flash-points up to 175 °C

Closed-cup test methods - non-equilibrium procedure

Abel method: EN ISO 13736:2008

Abel-Pensky method: DIN 51755:1974-03 or NF M T60-103:1968

Pensky-Martens method: EN ISO 2719:2012

Luchaire apparatus: French standard NF T60-103:1968

Tag method: ASTM D56-05(2010)

Closed-cup test methods – equilibrium procedure

Rapid equilibrium procedure: ISO 3679:2015; ASTM D3278-96 (2011)

Closed-cup equilibrium procedure: EN ISO 1523:2002+AC1:2006; ASTM D3941-90 (2007)

For flash-points above 175 °C

In addition to the above-mentioned methods, the following open-cup test method may be applied:

Cleveland method: ISO 2592:2017; ASTM D92-12.

3.3 Explosion limits:

Determination of upper and lower explosion limits in accordance with EN 1839:2017.

3.4 Maximum safe gap in accordance with IEC 60079-20-1:2010 in mm.

3.5 Is the substance stabilized during transport? If so, provide data on the stabilizer:

.....

3.6 Decomposition products in the event of combustion on contact with air or under the influence of an external fire:

3.7 Is the substance fire intensifying?

3.8 Abrasion (corrosion) mm/year.

3.9 Does the substance react with water or moist air by releasing flammable or toxic gases? Yes/No.
Gases released:

3.10 Does the substance react dangerously in any other way?

3.11 Does the substance react dangerously when reheated?
Yes/no

4. Physiological hazards

- 4.1 LD₅₀ and/or LC₅₀ value. Necrosis value (where applicable, other toxicity criteria in accordance with 2.2.61.1 of ADN).

CMR properties according to Categories 1A and 1B of chapters 3.5, 3.6 and 3.7 of GHS.

- 4.2 Does decomposition or reaction produce substances posing physiological hazards? (Indicate which substances where known)

- 4.3 Environmental properties (see 2.4.2.1 of ADN)

Acute toxicity:

LC₅₀ 96 hr for fish mg/l

EC₅₀ 48 hr for crustacea mg/l

ErC₅₀ 72 hr for algae mg/l

Chronic toxicity:

NOEC mg/l

BCF mg/l or log K_{ow}

Easily biodegradable yes/no

5. Data on hazard potential

- 5.1 What specific damage is to be expected if the hazard characteristics produce their effect?

- ☐ Combustion
- ☐ Injury
- ☐ Corrosion
- ☐ Intoxication in the event of dermal absorption
- ☐ Intoxication in the event of absorption by inhalation
- ☐ Mechanical damage
- ☐ Destruction
- ☐ Fire
- ☐ Abrasion (corrosion to metals)
- ☐ Environmental pollution

6. Data on the transport equipment

6.1 Are particular loading requirements envisaged/necessary (what are they)?

7. Transport of dangerous substances in tanks

7.1 With which materials is the substance to be carried compatible?

8. Technical safety requirements

8.1 Taking into account the current state of science and technology, what safety measures are necessary in the light of the hazards posed by the substance or liable to arise in the course of the transport process as a whole?

8.2 Additional safety measures

- Use of stationary or mobile techniques to measure flammable gases and flammable liquid vapours.
- Use of stationary or mobile techniques (toximeters) to measure concentrations of toxic substances.

3.2.4.3 Criteria for assignment of substances**A. Columns (6), (7) and (8): Determination of the type of tank vessel****1. Gases** (criteria according to 2.2.2 of ADN)

- Without refrigeration: type G pressure
- With refrigeration: type G refrigerated

2. Halogenated hydrocarbons

Substances that may only be transported in a stabilized state

Toxic substances (see 2.2.61.1 of ADN)

Flammable (flash-point < 23 °C) and **corrosive substances** (see 2.2.8 of ADN)

Substances with an auto-ignition temperature ≤ 200 °C

Substances with a flash-point < 23 °C and an explosivity range > 15% at 20 °C

Benzene and mixtures of non-toxic and non-corrosive substances containing more than 10% benzene

Environmentally hazardous substances, aquatic toxicity category Acute 1 or Chronic 1 (group N1 in accordance with 2.2.9.1.10.2 of ADN) and vapour pressure at 50 °C ≥ 1 kPa

- Cargo tank internal pressure > 50 kPa at the following temperatures: liquid 30 °C, gaseous phase 37.8 °C
 - Without refrigeration: type C pressure (400 kPa)
 - With refrigeration: type C refrigerated
- Cargo tank internal pressure ≤ 50 kPa at the following temperatures: liquid 30 °C, gaseous phase 37.8 °C but with cargo tank internal pressure > 50 kPa at 50 °C
 - Without water spraying: type C pressure (400 kPa)
 - With water spraying: type C with pressure relief valve/high velocity vent valve opening pressure of 50 kPa
- Cargo tank internal pressure ≤ 50 kPa at the following temperatures: liquid 30 °C, gaseous phase 37.8 °C

with cargo tank internal pressure ≤ 50 kPa at 50 °C	type C	with pressure relief valve/high velocity vent valve opening pressure as calculated, but at least 10 kPa
--	--------	---

2.1 Mixtures for which type C is required in accordance with the criteria referred to in 2 above but for which certain data are lacking

In cases where the internal pressurization of the tank cannot be calculated owing to a lack of data, the following criteria may be used

– Initial boiling point $\leq 60\text{ }^{\circ}\text{C}$	type C	(400 kPa)
– $60\text{ }^{\circ}\text{C} < \text{initial boiling point} \leq 85\text{ }^{\circ}\text{C}$	type C	with pressure relief valve/high velocity vent valve opening pressure of 50 kPa and with water spraying
– $85\text{ }^{\circ}\text{C} < \text{initial boiling point} \leq 115\text{ }^{\circ}\text{C}$	type C	with pressure relief valve/high velocity vent valve opening pressure of 50 kPa
– $115\text{ }^{\circ}\text{C} < \text{initial boiling point}$	type C	with pressure relief valve/high velocity vent valve opening pressure of 35 kPa

3. Substances which are flammable only (see 2.2.3 of ADN)

– Flash-point $< 23\text{ }^{\circ}\text{C}$ with $175\text{ kPa} \leq P_v 50 < 300\text{ kPa}$		
• Without refrigeration:	closed type N	pressure (400 kPa)
• With refrigeration:	closed type N	refrigerated with pressure relief valve/high velocity vent valve opening pressure of 50 kPa
– Flash-point $< 23\text{ }^{\circ}\text{C}$ with $150\text{ kPa} \leq P_v 50 < 175\text{ kPa}$:	closed type N	with pressure relief valve/high velocity vent valve opening pressure of 50 kPa
– Flash-point $< 23\text{ }^{\circ}\text{C}$ with $110\text{ kPa} \leq P_v 50 < 150\text{ kPa}$		
• Without water spraying:	closed type N	with pressure relief valve/high velocity vent valve opening pressure of 50 kPa
• With water spraying:	closed type N	with pressure relief valve/high velocity vent valve opening pressure of 10 kPa
– Flash-point $< 23\text{ }^{\circ}\text{C}$ with $P_v 50 < 110\text{ kPa}$:	closed type N	with pressure relief valve/high velocity vent valve opening pressure of 10 kPa
– Flash-point $\geq 23\text{ }^{\circ}\text{C}$ but $\leq 60\text{ }^{\circ}\text{C}$:	open type N	with flame-arrester

- | | | |
|--|-------------|---------------------|
| – Substances with a flash-point > 60 °C heated to less than 15 K from the flash-point, N.O.S. (...): | open type N | with flame-arrester |
| – Substances with a flash-point > 60 °C heated to or above the flash-point, N.O.S. (...): | open type N | with flame-arrester |

4. Corrosive substances (see 2.2.8 of ADN)

– Corrosive substances liable to produce corrosive vapours

- | | | |
|---|---------------|---|
| • Substances assigned to packing group I or II in the list of substances and having a vapour pressure ² greater than 12.5 kPa (125 mbar) at 50 °C or | closed type N | cargo tank walls must be distinct from vessel hull; pressure relief valve/high velocity vent valve opening pressure of 10 kPa |
| • Substances liable to react dangerously with water (for example acid chlorides) | | |
| • Substances containing gases in solution | | |

– Corrosive acids:

- | | | |
|---|-------------|--|
| • Substances assigned to packing group I or II in the list of substances and having a vapour pressure ² of 12.5 kPa (125 mbar) or less at 50 °C or | open type N | cargo tank walls must be distinct from vessel hull |
| • Substances assigned to packing group III in the list of substances and having a vapour pressure ² of > 6.0 kPa (60 mbar) at 50 °C or | open type N | cargo tank walls must be distinct from vessel hull |
| • Substances assigned to packing group III in the list of substances because of their degree of corrosiveness to steel or aluminium or | open type N | cargo tank walls must be distinct from vessel hull |
| • Substances with a melting point greater than 0 °C and transported at elevated temperatures | open type N | cargo tank walls must be distinct from vessel hull |
| • Flammable substances | open type N | with flame-arresters |
| • Elevated temperature substances | open type N | with flame-arresters |
| • Non-flammable substances | open type N | without flame-arresters |

² If the data are available, the sum of the partial pressures of the dangerous substances may be used in place of the vapour pressure.

– **All other corrosive substances:**

- Flammable substance open type N with flame-arresters
- Non-flammable substances open type N without flame-arresters

5. Environmentally hazardous substances (see 2.2.9.1 of ADN)

- Aquatic toxicity Acute 1 or Chronic 1 (group N1 in accordance with 2.2.9.1.10.2) and vapour pressure below 1 kPa at 50 °C closed type N cargo tank walls must be distinct from vessel hull
- Chronic 2 and 3 (group N2 in accordance with 2.2.9.1.10.2) open type N cargo tank walls must be distinct from vessel hull
- Acute 2 and 3 (group N3 in accordance with 2.2.9.1.10.2) open type N _____

6. Substances of Class 9, UN No. 3257 open type N independent cargo tanks

7. Substances of Class 9, Identification No. 9003

Flash-point > 60 °C and ≤ 100 °C: open type N _____

8. Substances that must be transported at elevated temperatures

For substances that must be transported at elevated temperatures, the type of cargo tank shall be determined on the basis of the transport temperature, using the following table:

Maximum transport temperature T in °C	Type N	Type C
$T \leq 80$	2	2
$80 < T \leq 115$	1 + remark 25	1 + remark 26
$T > 115$	1	1

1 = cargo tank type: independent tank

2 = cargo tank type: integral tank

Remark 25 = remark No. 25 in column (20) of the list of substances contained in Chapter 3.2, Table C.

Remark 26 = remark No. 26 in column (20) of the list of substances contained in Chapter 3.2, Table C.

9. Substances with long-term effects on health - CMR substances (Categories 1A and 1B in accordance with the criteria of chapters 3.5, 3.6 and 3.7 of GHS³), provided that they are already assigned to Classes 2 to 9 by virtue of other criteria

C carcinogenic

M mutagenic

³ Since there is no official international list of CMR substances of Categories 1A and 1B, pending the availability of such a list, the list of CMR substances of Categories 1A and 1B in Regulation (EC) No 1272/2008 of the European Parliament and of the Council, as amended, shall apply.

R toxic to reproduction

closed type N

cargo tank walls must be distinct from vessel hull; pressure relief valve/high velocity vent valve opening pressure of at least 10 kPa, with water-spray system, if the internal pressurization of the tank is more than 10 kPa (calculation of the vapour pressure according to the formula for column 10, except that $v_a = 0.03$)

- 10. Substances that float on the water surface ('floaters') or sink to the bottom of the water ('sinkers') (criteria according to 2.2.9.1.10.5) provided that they are already assigned to Classes 3 to 9 and that type N is required on that basis**

open type N

cargo tank walls must be distinct from vessel hull

B. Column (9): Determination of cargo tank equipment

- (1) Refrigeration system

Determined in accordance with A.

- (2) Possibility of heating the cargo

A possibility of heating the cargo shall be required:

- When the melting point of the substance to be transported is + 15 °C or greater, or
- When the melting point of the substance to be transported is greater than 0 °C but less than + 15 °C and the outside temperature is no more than 4 K above the melting point. In column (20), reference shall be made to remark 6 with the temperature derived as follows: melting point + 4 K.

- (3) Water-spray system

Determined in accordance with A.

- (4) Cargo heating system on board

A cargo heating system on board shall be required:

- For substances that must not be allowed to solidify owing to the possibility of dangerous reactions on reheating, and
- For substances that must be maintained at a guaranteed temperature of not less than 15 K below their flash-point.

C. Column (10): Determination of opening pressure of high-velocity vent valve in kPa

For vessels of type C, the opening pressure of the high-velocity vent valve shall be determined on the basis of the internal pressure of the tanks, rounded up to the nearest 5 kPa.

To calculate the internal pressure, the following formula shall be used:

$$P_{\max} = P_{\text{Obmax}} + \frac{k \cdot v_a (P_0 - P_{\text{Da}})}{v_a - \alpha \cdot \delta_t + \alpha \cdot \delta_t \cdot v_a} - P_0$$

$$k = \frac{T_{\text{Dmax}}}{T_a}$$

In this formula:

- $P_{\max}$: Maximum internal pressure in kPa
 P_{Obmax} : Absolute vapour pressure at maximum liquid surface temperature in kPa
 P_{Da} : Absolute vapour pressure at filling temperature in kPa
 P_0 : Atmospheric pressure in kPa
 v_a : Free relative volume at filling temperature compared with cargo tank volume
 α : Cubic expansion coefficient in K^{-1}
 δ_t : Average temperature increase of the liquid due to heating in K
 T_{Dmax} : Maximum gaseous phase temperature in K
 T_a : Filling temperature in K
 k : Temperature correction factor
 t_{Ob} : Maximum liquid surface temperature in $^{\circ}\text{C}$

In the formula, the following basic data are used:

- P_{Obmax} : At 50 $^{\circ}\text{C}$ and 30 $^{\circ}\text{C}$
 P_{Da} : At 15 $^{\circ}\text{C}$
 P_0 : 101.3 kPa
 v_a : 5% = 0.05
 δ_t : 5 K
 T_{Dmax} : 323 K and 310.8 K
 T_a : 288 K
 t_{Ob} : 50 $^{\circ}\text{C}$ and 30 $^{\circ}\text{C}$

D. Column (11): Determination of maximum degree of filling of cargo tanks

If, in accordance with the provisions under A above:

- Type G is required: 91% however, in the case of deeply refrigerated substances: 95%
- Type C is required: 95%
- Type N is required: 97% however, in the case of substances in a molten state and of flammable liquids with $175 \text{ kPa} \leq P_{\text{v50}} < 300 \text{ kPa}$: 95%.

E. Column (13): Determination of type of sampling device

- 1 = *closed*: - Substances to be transported in pressure cargo tanks and in membrane tanks
 - Substances with danger 6.1 in column (5) and assigned to packing group I
 - Stabilized substances to be transported under inert gas
- 2 = *partly closed*: - All other substances for which type C or substances with CMR properties for which type N with closed cargo tanks is required
 - Substances with danger CMR in column (5) and for which no closed sampling is required
- 3 = *open*: - All other substances

F. Column (14): Determination of whether a pump room is permitted below deck

- No - All substances with letter T in the classification code indicated in column (3b) with the exception of substances of Class 2.
- Yes - All other substances

G. Column (15): Determination of temperature class

Flammable substances shall be assigned to a temperature class on the basis of their auto-ignition point:

Temperature class	Auto-ignition temperature T of flammable liquids and gases in °C
T1	$T > 450$
T2	$300 < T \leq 450$
T3	$200 < T \leq 300$
T4	$135 < T \leq 200$
T5	$100 < T \leq 135$
T6	$85 < T \leq 100$

When anti-explosion protection is required and the auto-ignition temperature is not known, reference shall be made to temperature class T4, considered safe.

H. Column (16): Determination of explosion group

Flammable substances shall be assigned to an explosion group on the basis of their maximum experimental safe gaps.

The maximum experimental safe gaps shall be determined in accordance with standard IEC 60079-20-1.

The different explosion groups are as follows:

Explosion group	Maximum experimental safe gap in mm
II A	> 0.9
II B	≥ 0.5 to ≤ 0.9
II C	< 0.5

Where self-contained protection systems are in place, the different subgroups for explosion group II B are as follows:

Explosion group/subgroup	Maximum experimental safe gap in mm
II B1	> 0.85 to ≤ 0.9
II B2	> 0.75 to ≤ 0.85
II B3	> 0.65 to ≤ 0.75
II B	≥ 0.5 to ≤ 0.65

When anti-explosion protection is required and the relevant data are not provided, reference shall be made to explosion group II B, considered safe.

I. Column (17): Determination of whether anti-explosion protection is required

- Yes
- For substances with a flash-point ≤ 60 °C
 - For substances that must be transported while heated to a temperature of less than 15 K below their flash-point
 - For substances that must be transported while heated to a temperature of 15 K or more below their flash-point and where in column (9) (cargo tank equipment) only a possibility of cargo heating (2) and no cargo-heating system on board (4) is required
 - For flammable gases
- No
- For all other substances

J. Column (18): Determination of whether personal protective equipment, escape devices, portable gas detectors, portable toximeters or ambient-air-dependent breathing apparatus is required

- PP: For all substances of Classes 1 to 9;
- EP: For all substances
 - of Class 2 with letter T or letter C in the classification code indicated in column (3b);
 - of Class 3 with letter T or letter C in the classification code indicated in column (3b);
 - of Class 4.1;
 - of Class 6.1;
 - of Class 8; and
 for CMR substances of Category 1A or 1B according to chapters 3.5, 3.6 and 3.7 of GHS;³
- EX: For all substances for which anti-explosion protection is required;

³ Since there is no official international list of CMR substances of Categories 1A and 1B, pending the availability of such a list, the list of CMR substances of Categories 1A and 1B in Regulation (EC) No 1272/2008 of the European Parliament and of the Council, as amended, shall apply.

- TOX: For all substances of Class 6.1;
For all substances of other classes with T in column (3b);
For CMR substances of Category 1A or 1B according to chapters 3.5, 3.6 and 3.7 of GHS;³
- A: For all substances for which EX or TOX is required.

K. Column (19): Determination of the number of cones or blue lights

For all substances of Class 2 with letter F in the classification code indicated in column (3b):	1 cone/light
For all substances of Classes 3 to 9 with letter F in the classification code indicated in column (3b) and assigned to packing group I or II:	1 cone/light
For all substances of Class 2 with letter T in the classification code indicated in column (3b):	2 cones/lights
For all substances of Classes 3 to 9 with letter T in the classification code indicated in column (3b) and assigned to packing group I or II:	2 cones/lights

L. Column (20): Determination of additional requirements and remarks

- Remark 1:** Reference shall be made in column (20) to remark 1 for transport of UN No. 1005 AMMONIA, ANHYDROUS.
- Remark 2:** Reference shall be made in column (20) to remark 2 for stabilized substances that react with oxygen and for gases for which danger 2.1 is mentioned in column (5).
- Remark 3:** Reference shall be made in column (20) to remark 3 for substances that must be stabilized.
- Remark 4:** Reference shall be made in column (20) to remark 4 for substances that must not be allowed to solidify owing to the possibility of dangerous reactions on reheating.
- Remark 5:** Reference shall be made in column (20) to remark 5 for substances liable to polymerization.
- Remark 6:** Reference shall be made in column (20) to remark 6 for substances liable to crystallization and for substances for which a heating system or possibility of heating is required and the vapour pressure of which at 20 °C is greater than 0.1 kPa.
- Remark 7:** Reference shall be made in column (20) to remark 7 for substances with a melting point of + 15 °C or greater.
- Remark 8:** Reference shall be made in column (20) to remark 8 for substances that react dangerously with water.
- Remark 9:** Reference shall be made in column (20) to remark 9 for transport of UN No. 1131 CARBON DISULPHIDE.
- Remark 10:** *No longer used.*

³ Since there is no official international list of CMR substances of Categories 1A and 1B, pending the availability of such a list, the list of CMR substances of Categories 1A and 1B in Regulation (EC) No 1272/2008 of the European Parliament and of the Council, as amended, shall apply.

- Remark 11:** Reference shall be made in column (20) to remark 11 for transport of UN No. 1040 ETHYLENE OXIDE WITH NITROGEN.
- Remark 12:** Reference shall be made in column (20) to remark 12 for transport of UN No. 1280 PROPYLENE OXIDE and UN No. 2983 ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE.
- Remark 13:** Reference shall be made in column (20) to remark 13 for transport of UN No. 1086 VINYL CHLORIDE, STABILIZED.
- Remark 14:** Reference shall be made in column (20) to remark 14 for mixtures or N.O.S. entries which are not clearly defined and for which type N is stipulated under the classification criteria.
- Remark 15:** Reference shall be made in column (20) to remark 15 for substances that react dangerously with alkalis or acids such as sodium hydroxide or sulphuric acid.
- Remark 16:** Reference shall be made in column (20) to remark 16 for substances that may react dangerously to local overheating.
- Remark 17:** Reference shall be made in column (20) to remark 17 for substances when reference is made to remark 4, 6 or 7.
- Remark 18:** *No longer used.*
- Remark 19:** Reference shall be made in column (20) to remark 19 for substances that must under no circumstances come into contact with water.
- Remark 20:** Reference shall be made in column (20) to remark 20 for substances the transport temperature of which must not exceed a maximum temperature in combination with the cargo tank materials. Reference shall be made to this maximum permitted temperature immediately after the number 20.
- Remark 21:** *No longer used.*
- Remark 22:** Reference shall be made in column (20) to remark 22 for substances for which a range of values or no value of the density is indicated in column (12).
- Remark 23:** Reference shall be made in column (20) to remark 23 for substances the internal pressure of which at 30 °C is less than 50 kPa and which are transported with water spraying.
- Remark 24:** Reference shall be made in column (20) to remark 24 for transport of UN No. 3257 ELEVATED TEMPERATURE LIQUID, N.O.S.
- Remark 25:** Reference shall be made in column (20) to remark 25 for substances that must be transported while heated in a type 3 cargo tank.
- Remark 26:** Reference shall be made in column (20) to remark 26 for substances that must be transported while heated in a type 2 cargo tank.
- Remark 27:** Reference shall be made in column (20) to remark 27 for substances for which the reference N.O.S. or a generic reference is made in column (2) and for which the proper shipping names are not already supplemented with the technical name of the goods or additional information concerning the benzene content.
- Remark 28:** Reference shall be made in column (20) to remark 28 for transport of UN No. 2448 SULPHUR, MOLTEN.
- Remark 29:** *No longer used.*

- Remark 30:** Reference shall be made in column (20) to remark 30 for transport of UN Nos. 1719, 1794, 1814, 1819, 1824, 1829, 1830, 1832, 1833, 1906, 2240, 2308, 2583, 2584, 2677, 2679, 2681, 2796, 2797, 2837 and 3320 under the entries for which open type N is required.
- Remark 31:** Reference shall be made in column (20) to remark 31 for transport of substances of Class 2 and UN Nos. 1280 PROPYLENE OXIDE and 2983 ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE of Class 3.
- Remark 32:** Reference shall be made in column (20) to remark 32 for transport of UN No. 2448 SULPHUR, MOLTEN of Class 4.1.
- Remark 33:** Reference shall be made in column (20) to remark 33 for transport of UN Nos. 2014 and 2984 HYDROGEN PEROXIDE, AQUEOUS SOLUTION of Class 5.1.
- Remark 34:** Reference shall be made in column (20) to remark 34 for transport of substances for which hazard 8 is mentioned in column (5) and type N in column (6).
- Remark 35:** Reference shall be made in column (20) to remark 35 for substances for which complete refrigeration may cause dangerous reactions in the event of compression. This is also applicable if the refrigeration is partly done by compression.
- Remark 36:** *No longer used.*
- Remark 37:** Reference shall be made in column (20) to remark 37 for substances for which the cargo storage system must be capable of resisting the full vapour pressure of the cargo at the upper limits of the ambient design temperatures, whatever the system adopted for the boil-off gas.
- Remark 38:** Reference shall be made in column (20) to remark 38 for mixtures with an initial boiling point above 60 °C or under or equal to 85 °C in accordance with ASTM D 86-01.
- Remark 39:** Reference shall be made in column (20) to remark 39 for the carriage of UN No. 1977 NITROGEN, REFRIGERATED, LIQUID and UN No. 2187 CARBON DIOXIDE, REFRIGERATED LIQUID of Class 2.
- Remark 40:** *No longer used.*
- Remark 41:** Reference shall be made in column (20) to remark 41 for UN No. 2709 BUTYLBENZENES (n-BUTYLBENZENE).
- Remark 42:** Reference shall be made in column (20) to remark 42 for UN No. 1038 ETHYLENE, REFRIGERATED LIQUID, for UN No. 1972 METHANE REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID, with high methane content, for UN No. 1977 NITROGEN, REFRIGERATED, LIQUID and for UN No. 2187, CARBON DIOXIDE, REFRIGERATED LIQUID.
- Remark 43:** Reference shall be made in column (20) to remark 43 for all packing group I entries with letter F (flammable) in the classification code indicated in column (3b), and with letter F (floater) in column (5), Dangers.
- Remark 44:** *(Reserved)*
- Remark 45:** *(Reserved)*
- Remark 46:** Reference shall be made in column (20) to remark 46 for the carriage of UN No. 1977 NITROGEN, REFRIGERATED, LIQUID of Class 2.
- Remark 47:** Reference shall be made in column (20) to remark 47 for UN No. 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE; LIQUID, N.O.S. (HEAVY HEATING OIL).