

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.6

Revision Date 30.04.2025

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : EPA 625 Semivolatile Calibration Mix

Product Number : 506559

Brand : Supelco

REACH No. : This product is a mixture. REACH Registration Number see section 3.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Scientific research and development

1.3**1.4 Emergency telephone**

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Flammable liquids, (Category 2)	H225: Highly flammable liquid and vapor.
Acute toxicity, (Category 4)	H302: Harmful if swallowed.
Acute toxicity, (Category 4)	H332: Harmful if inhaled.
Skin irritation, (Category 2)	H315: Causes skin irritation.
Eye irritation, (Category 2)	H319: Causes serious eye irritation.
Germ cell mutagenicity, (Category 1B)	H340: May cause genetic defects.
Carcinogenicity, (Category 1A)	H350: May cause cancer.

Specific target organ toxicity - single exposure, (Category 3), Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure, (Category 1), Blood	H372: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard, (Category 1)	H304: May be fatal if swallowed and enters airways.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 1)	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word	Danger
Hazard Statements	
H225	Highly flammable liquid and vapor.
H302 + H332	Harmful if swallowed or if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H372	Causes damage to organs (Blood) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P331	Do NOT induce vomiting.
Supplemental Hazard Statements	none
EUH208	Contains: benzo[a]pyrene, 2,4-xyleneol; 2,4-dimethylphenol, 1,2-Dichlorobenzene, chlorocresol, 3,5-Dinitro-2-hydroxytoluene. May produce an allergic reaction. Restricted to professional users.

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Danger

Hazard Statements

H340

May cause genetic defects.

H350

May cause cancer.

H372

Causes damage to organs through prolonged or repeated exposure.

H304

May be fatal if swallowed and enters airways.

Precautionary Statements

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331

Do NOT induce vomiting.

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

Ecological information:

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Toxicological information:

This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Component		Classification	Concentration
Dichloromethane			
CAS-No.	75-09-2	Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H315, H319, H351, H336 Concentration limits: 20 %: STOT SE 3, H336;	>= 50 - < 70 %
EC-No.	200-838-9		
Index-No.	602-004-00-3		
Registration number	01-2119480404-41- XXXX		
benzene			
CAS-No.	71-43-2	Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Carc. 1A; STOT RE 1; Asp. Tox. 1; Aquatic Chronic 3; H225, H315, H319, H340, H350, H372, H304, H412	>= 30 - < 50 %
EC-No.	200-753-7		
Index-No.	601-020-00-8		
Registration number	01-2119447106-44- XXXX		
bis(2-chloroethyl) ether			
CAS-No.	111-44-4	Flam. Liq. 3; Acute Tox. 2;	>= 0,1 - < 1

EC-No.	203-870-1	Acute Tox. 1; Carc. 2;	%
Index-No.	603-029-00-2 *	H226, H300, H330, H310, H351	
dibutyl phthalate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	84-74-2	Repr. 1B; Aquatic Acute 1;	>= 0,1 - <
EC-No.	201-557-4	Aquatic Chronic 2;	0,25 %
Index-No.	607-318-00-4	H360FD, H400, H411	
Registration number	01-2119493042-44-XXXX	M-Factor - Aquatic Acute: 1	
Hexachloroethane			
CAS-No.	67-72-1	Eye Irrit. 2; Carc. 2;	>= 0,1 - <
EC-No.	200-666-4	Aquatic Acute 1; Aquatic Chronic 1; H319, H351, H400, H410	0,25 %
	*	M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	
Hexachlorobenzene			
CAS-No.	118-74-1	Carc. 1B; STOT RE 1;	>= 0,1 - <
EC-No.	204-273-9	Aquatic Acute 1; Aquatic Chronic 1; H350, H372, H400, H410	0,25 %
Index-No.	602-065-00-6	M-Factor - Aquatic Acute: 100	
	*	M-Factor - Aquatic Chronic: 100	
1,2,4-trichlorobenzene			
CAS-No.	120-82-1	Acute Tox. 4; Skin Irrit. 2;	>= 0,1 - <
EC-No.	204-428-0	Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H400, H410	0,25 %
Index-No.	602-087-00-6		
Registration number	01-2119421789-28-XXXX		
Bis(2-ethylhexyl) phthalate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	117-81-7	Repr. 1B; H360FD	>= 0,1 - <
EC-No.	204-211-0		0,3 %
Index-No.	607-317-00-9		
Registration number	01-2119484611-38-XXXX		
2,4-dichlorophenol			
CAS-No.	120-83-2	Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Chronic 2; H302, H311, H314, H318, H411	>= 0,1 - <
EC-No.	204-429-6		0,25 %
Index-No.	604-011-00-7		
	*		

1-Chloro-4-phenoxybenzene			
CAS-No.	7005-72-3	Eye Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 0,1 - < 0,25 %
EC-No.	230-281-7		
	*		
2,4-dinitrotoluene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	121-14-2	Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H311, H341, H350, H361fd, H373, H400, H410	>= 0,1 - < 0,25 %
EC-No.	204-450-0		
Index-No.	609-007-00-9		
	*		
1,4-dichlorobenzene			
CAS-No.	106-46-7	Eye Irrit. 2; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H351, H400, H410 M-Factor - Aquatic Acute: 1	>= 0,1 - < 0,25 %
EC-No.	203-400-5		
Index-No.	602-035-00-2		
	*		
1,2-Dichlorobenzene			
CAS-No.	95-50-1	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H315, H319, H317, H335, H400, H410	>= 0,1 - < 0,25 %
EC-No.	202-425-9		
Index-No.	602-034-00-7		
	*		
chlorocresol			
CAS-No.	59-50-7	Acute Tox. 4; Skin Corr. 1C; Eye Dam. 1; Skin Sens. 1B; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 3; H302, H314, H318, H317, H335, H400, H412 M-Factor - Aquatic Acute: 1	>= 0,1 - < 0,25 %
EC-No.	200-431-6		
Index-No.	604-014-00-3		
Registration number	01-2119938953-25-XXXX		
2-nitrophenol			
CAS-No.	88-75-5	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H312, H400, H410	>= 0,1 - < 0,25 %
EC-No.	201-857-5		
	*		

1,2,3,4,5,5-Hexachlorocyclopentadiene			
CAS-No.	77-47-4	Acute Tox. 4; Acute Tox. 1; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H330, H311, H314, H318, H400, H410	>= 0,1 - < 0,25 %
EC-No.	201-029-3	M-Factor - Aquatic Acute: 100	
Index-No.	602-078-00-7 *	M-Factor - Aquatic Chronic: 10	
2,4-Dinitrophenol			
CAS-No.	51-28-5	Expl. 1.1; Acute Tox. 2; Acute Tox. 3; STOT RE 1; Aquatic Acute 1; H201, H300, H331, H311, H372, H400	>= 0,1 - < 0,25 %
EC-No.	200-087-7		
Index-No.	609-041-00-4 *		
isophorone			
CAS-No.	78-59-1	Acute Tox. 4; Eye Irrit. 2; Carc. 2; STOT SE 3; H302, H312, H319, H351, H335	>= 0,1 - < 1 %
EC-No.	201-126-0	Concentration limits: >= 10 %: STOT SE 3, H335;	
Index-No.	606-012-00-8 *		
2,6-Dinitrotoluene			
CAS-No.	606-20-2	Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT RE 2; Aquatic Chronic 3; H301, H331, H311, H341, H350, H361f, H373, H412	>= 0,1 - < 0,25 %
EC-No.	210-106-0		
Index-No.	609-049-00-8 *		
4-Bromophenyl phenyl ether			
CAS-No.	101-55-3	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	>= 0,1 - < 0,25 %
EC-No.	202-952-4	M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10	
	*		
Nitrobenzene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	98-95-3	Acute Tox. 3; Carc. 2; Repr. 1B; STOT RE 1; Aquatic Chronic 3; H301, H331, H311, H351, H360F, H372, H412	>= 0,1 - < 0,25 %
EC-No.	202-716-0		
Index-No.	609-003-00-7		
Registration number	01-2119449806-28-XXXX		
2,4,6,-Trichlorophenol			
CAS-No.	88-06-2	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Carc. 2;	>= 0,1 - < 0,25 %
EC-No.	201-795-9		

Index-No.	604-018-00-5 *	Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H319, H351, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	
Hexachlorobuta-1,3-diene			
CAS-No.	87-68-3	Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H310, H315, H319, H351, H400, H410	>= 0,1 - < 0,25 %
EC-No.	201-765-5 *		
3,5-Dinitro-2-hydroxytoluene			
CAS-No.	534-52-1	Acute Tox. 2; Acute Tox. 1; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; Muta. 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H330, H310, H315, H318, H317, H341, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 0,1 - < 0,25 %
EC-No.	208-601-1		
Index-No.	609-020-00-X *		
Indeno[1,2,3-cd]pyrene			
CAS-No.	193-39-5	Carc. 2; H351	>= 0,1 - < 1 %
EC-No.	205-893-2 *		
2,4-xylenol; 2,4-dimethylphenol			
CAS-No.	105-67-9	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1B; Aquatic Chronic 2; H301, H311, H314, H318, H317, H411	>= 0,1 - < 0,25 %
EC-No.	203-321-6		
Index-No.	604-006-00-X *		
benzo[a]pyrene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	50-32-8	Skin Sens. 1; Muta. 1B; Carc. 1B; Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H317, H340, H350, H360FD, H400, H410 Concentration limits: >= 0,01 %: Carc. 1B, H350;	>= 0,1 - < 0,25 %
EC-No.	200-028-5		
Index-No.	601-032-00-3 *		
Dibenz[a,h]anthracene			
CAS-No.	53-70-3	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350,	>= 0,1 - < 0,25 %
EC-No.	200-181-8		

Index-No.	601-041-00-2 *	H400, H410 Concentration limits: >= 0,01 %: Carc. 1B, H350; M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 100	
N-Nitrosodimethylamine			
CAS-No.	62-75-9	Acute Tox. 2; Acute Tox. 1; Carc. 1B; STOT RE 1; Aquatic Chronic 2; H300, H330, H350, H372, H411	>= 0,1 - < 0,25 %
EC-No.	200-549-8	Concentration limits: >= 0,001 %: Carc. 1B, H350;	
Index-No.	612-077-00-3 *		
N-Nitroso dipropylamine			
CAS-No.	621-64-7	Acute Tox. 4; Carc. 1B; Aquatic Chronic 2; H302, H350, H411	>= 0,1 - < 0,25 %
EC-No.	210-698-0	Concentration limits: >= 0,001 %: Carc. 1B, H350;	
Index-No.	612-098-00-8 *		
Bis(2-chloro-1-methylethyl) ether			
CAS-No.	108-60-1	Acute Tox. 3; Acute Tox. 4; H301, H332	>= 0,1 - < 1 %
EC-No.	203-598-3 *		
Bis-(2-chloroethoxy)methane			
CAS-No.	111-91-1	Acute Tox. 3; Acute Tox. 4; STOT SE 1; STOT RE 2; H301, H312, H370, H373	>= 0,1 - < 1 %
EC-No.	203-920-2 *		
Pyrene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	129-00-0	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	>= 0,1 - < 0,25 %
EC-No.	204-927-3 *	M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	
Benzo[b]fluoranthene			
CAS-No.	205-99-2	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410	>= 0,1 - < 0,25 %
EC-No.	205-911-9		
Index-No.	601-034-00-4 *		
chrysene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	218-01-9	Muta. 2; Carc. 1B; Aquatic Acute 1; Aquatic Chronic	>= 0,1 - < 0,25 %
EC-No.	205-923-4		

Index-No.	601-048-00-0 *	1; H341, H350, H400, H410 M-Factor - Aquatic Acute: 10	
Benzo[k]fluoranthene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	207-08-9	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410	>= 0,1 - < 0,25 %
EC-No.	205-916-6	M-Factor - Aquatic Acute: 10	
Index-No.	601-036-00-5 *	M-Factor - Aquatic Chronic: 10	
Benzo[jk]fluorene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	206-44-0	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H400, H410	>= 0,1 - < 0,25 %
EC-No.	205-912-4 *	M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	
anthracene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	120-12-7	Eye Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H400, H410	>= 0,1 - < 0,25 %
EC-No.	204-371-1 *	M-Factor - Aquatic Acute: 1.000 M-Factor - Aquatic Chronic: 100	
Naphthalene			
CAS-No.	91-20-3	Flam. Sol. 2; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H228, H302, H351, H400, H410	>= 0,1 - < 0,25 %
EC-No.	202-049-5		
Index-No.	601-052-00-2		
Registration number	01-2119561346-37-XXXX		
Benzo[ghi]perylene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	191-24-2	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	>= 0,1 - < 0,25 %
EC-No.	205-883-8 *	M-Factor - Aquatic Acute: 1.000 - Aquatic Chronic: 1.000	
acenaphthene			
CAS-No.	83-32-9	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	>= 0,1 - < 0,25 %
EC-No.	201-469-6 *	M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	

phenanthrene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	85-01-8	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 0,1 - < 0,25 %
EC-No.	201-581-5		
	*		
Benz[a]anthracene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	56-55-3	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410	>= 0,1 - < 0,25 %
EC-No.	200-280-6		
Index-No.	601-033-00-9		
	*		
Fluorene			
CAS-No.	86-73-7	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 0,1 - < 0,25 %
EC-No.	201-695-5		
	*		
Azobenzene			
CAS-No.	103-33-3	Acute Tox. 4; Muta. 2; Carc. 1B; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H341, H350, H373, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 10	>= 0,1 - < 0,25 %
EC-No.	203-102-5		
Index-No.	611-001-00-6		
	*		
Benzyl butyl phthalate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	85-68-7	Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H360FD, H400, H410 M-Factor - Aquatic Acute: 1	>= 0,1 - < 0,25 %
EC-No.	201-622-7		
Index-No.	607-430-00-3		
	*		
Pentachlorophenol			
CAS-No.	87-86-5	Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H301, H330, H311, H315, H319, H351, H335, H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 1	>= 0,1 - < 0,25 %
EC-No.	201-778-6		
Index-No.	604-002-00-8		
	*		

carbazole			
CAS-No.	86-74-8	Muta. 2; Carc. 2; Aquatic	>= 0,1 - < 0,25 %
EC-No.	201-696-0	Chronic 4; H341, H351, H413	
	*		
Phenol			
CAS-No.	108-95-2	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Muta. 2; STOT RE 2; Aquatic	>= 0,1 - < 0,25 %
EC-No.	203-632-7	Chronic 2; H301, H331, H311, H314, H318, H341, H373, H411	
Index-No.	604-001-00-2	Concentration limits:	
Registration number	01-2119471329-32-XXXX	>= 3 %: Skin Corr. 1B, H314; 1 - < 3 %: Skin Irrit. 2, H315; 1 - < 3 %: Eye Irrit. 2, H319;	

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Hydrogen chloride gas

Mixture with combustible ingredients.

Pay attention to flashback.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection required

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|-------------------|-------------------|
| a) Physical state | liquid |
| b) Color | No data available |
| c) Odor | No data available |

- | | |
|---|--|
| d) Melting point/freezing point | Melting point/ range: 5 °C |
| e) Initial boiling point and boiling range | 80,1 °C at 1.013 hPa |
| f) Flammability (solid, gas) | No data available |
| g) Upper/lower flammability or explosive limits | Upper explosion limit: 8 %(V)
Lower explosion limit: 1,3 %(V) |
| h) Flash point | No data available |
| i) Autoignition temperature | No data available |
| j) Decomposition temperature | No data available |
| k) pH | No data available |
| l) Viscosity | Viscosity, kinematic: No data available
Viscosity, dynamic: No data available |
| m) Water solubility | No data available |
| n) Partition coefficient: n-octanol/water | No data available |
| o) Vapor pressure | No data available |
| p) Density | 0,879 g/cm ³ at 20 °C |
| Relative density | No data available |
| q) Relative vapor density | No data available |
| r) Particle characteristics | No data available |
| | |
| s) Explosive properties | Not classified as explosive. |
| t) Oxidizing properties | none |

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

Strong bases, Bases, Oxidizing agents, Alkali metals, Strong acids and strong bases, Strong oxidizing agents, Metals, Copper, Amines, Strong acids, Acid chlorides, Acid anhydrides, Reducing agents, Vinyl compounds, acids, Chlorine, copper salts, mercury salts, Halogens, Brass, Aluminum, Strong reducing agents, Magnesium, Hypochlorites, Nitrates, Metallic salts, Strong mineral acids

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Oral: No data available

Acute toxicity estimate Oral - 1.990 mg/kg

(Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Inhalation - 4 h - 11 mg/l - vapor (Calculation method)

Symptoms: Possible symptoms: mucosal irritations

Acute toxicity estimate Dermal - > 2.000 mg/kg

(Calculation method)

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

Respiratory or skin sensitization

Mixture may produce an allergic reaction.

Germ cell mutagenicity

Possible mutagen

Carcinogenicity

Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Mixture may cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Mixture causes damage to organs through prolonged or repeated exposure.

- Blood

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment

This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Components:

Benzyl butyl phthalate:

Assessment

The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for human health.

dibutyl phthalate:

Assessment

The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for human health.

Bis(2-ethylhexyl) phthalate:

Assessment

The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for human health.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components

Dichloromethane

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg
(OECD Test Guideline 401)

LC50 Inhalation - Mouse - 4 h - 86 mg/l - vapor

Remarks: (ECHA)

Symptoms: Possible damages: , mucosal irritations

LD50 Dermal - Rat - male and female - > 2.000 mg/kg
(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritations - 4 h

(OECD Test Guideline 404)

Remarks: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation

Remarks: (ECHA)

Remarks: Risk of corneal clouding.

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Central nervous system

Acute inhalation toxicity - Possible damages:, mucosal irritations

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

benzene

Acute toxicity

LD50 Oral - Rat - male - > 2.000 mg/kg

(OECD Test Guideline 401)

Symptoms: Nausea

LD50 Oral - Rat - male and female - 3.002 mg/kg

(OECD Test Guideline 401)

Symptoms: Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.

Symptoms: mucosal irritations

LD50 Dermal - Rabbit - 13.630 mg/kg

Remarks: (IUCLID)

Skin corrosion/irritation

Skin - Rabbit

Result: irritating

(OECD Test Guideline 404)
Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes.

(OECD Test Guideline 405)

Remarks: (IUCLID)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

May cause genetic defects.

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male - Bone marrow

Result: positive

Carcinogenicity

May cause cancer. Positive evidence from human epidemiological studies.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Acute oral toxicity - Nausea

Acute oral toxicity - Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.

Acute inhalation toxicity - mucosal irritations

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

- Blood

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

Aspiration may cause pulmonary edema and pneumonitis.

bis(2-chloroethyl) ether

Acute toxicity

Acute toxicity estimate Oral - 5,1 mg/kg

(Expert judgment)

Oral: No data available

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Stomach/intestinal disorders, Diarrhea

Acute toxicity estimate Inhalation - 4 h - 0,6 mg/l - vapor

(Expert judgment)

Symptoms: mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed.

Acute toxicity estimate Dermal - 10 mg/kg

(Expert judgment)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Chicken eye

Result: No eye irritation - 10 s

(OECD Test Guideline 438)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: Micronucleus test

Test system: mouse lymphoma cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: positive

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Stomach/intestinal disorders, Diarrhea

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath,

Inhalation may lead to the formation of oedemas in the respiratory tract.,

Symptoms may be delayed.

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

dibutyl phthalate

Acute toxicity

LD50 Oral - Rat - male and female - 6.279 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - $\geq$ 15,68 mg/l - aerosol

Remarks: (ECHA)

LD50 Dermal - Rabbit - $>$ 21.000 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 72 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: *S. typhimurium*

Result: negative

Remarks: (ECHA)

Species: Mouse

Result: negative

Remarks: (ECHA)

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

Hexachloroethane

Acute toxicity

LD50 Oral - Rat - 4.460 mg/kg

Remarks: (RTECS)

Inhalation: No data available

LD50 Dermal - Rabbit - 32.000 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation - 1 h

(OECD Test Guideline 439)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes. - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Hexachlorobenzene**Acute toxicity**

LD50 Oral - Rat - 10.000 mg/kg

LD50 Oral - Mouse - 4.000 mg/kg

LD50 Oral - Cat - 1.700 mg/kg

LD50 Oral - Rabbit - 2.600 mg/kg

LD50 Oral - Guinea pig - > 3.000 mg/kg

LD50 Oral - Quail - > 6.400 mg/kg

LD50 Oral - Mammal - > 5.000 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Behavioral:Change in motor activity (specific assay).

LC50 Inhalation - Rat - 3.600 mg/m³ - dust/mist

LC50 Inhalation - Mouse - 4.000 mg/m³ - dust/mist

LC50 Inhalation - Cat - 1.600 mg/m³ - dust/mist

LC50 Inhalation - Rabbit - 1.800 mg/m³ - dust/mist

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburnlike responses to edematous, vesiculated lesions, or bullae

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.
Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Ingestion - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

1,2,4-trichlorobenzene**Acute toxicity**

LD50 Oral - Rat - male and female - 930 mg/kg

(OECD Test Guideline 401)

Acute toxicity estimate Oral - 930 mg/kg

(ATE value derived from LD50/LC50 value)

Inhalation: No data available

LD50 Dermal - Rat - 6.139 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Behavioral:Convulsions or effect on seizure threshold.

(RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: Moderate skin irritation

Remarks: (RTECS)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Bis(2-ethylhexyl) phthalate**Acute toxicity**

LD50 Oral - Rat - 30.000 mg/kg

Remarks: (RTECS)

LC0 Inhalation - Rat - male and female - 4 h - > 10,62 mg/l - vapor

(OECD Test Guideline 403)

Remarks: (highest concentration to be prepared)

LD50 Dermal - Rabbit - 19.800 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 72 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: negative

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: negative

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: negative

Test Type: Micronucleus test

Test system: Chinese hamster lung cells

Result: negative

Remarks: (ECHA)

Method: OECD Test Guideline 475

Species: Rat - male - Bone marrow

Result: negative
Method: OECD Test Guideline 486
Species: Rat - male and female - Liver cells
Result: negative

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

May damage the unborn child.
May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

2,4-dichlorophenol

Acute toxicity

LD50 Oral - Mouse - male and female - 1.276 - 1.352 mg/kg
(OECD Test Guideline 401)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute toxicity estimate Oral - 1.276 mg/kg

(ATE value derived from LD50/LC50 value)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

LD50 Dermal - Rat - male and female - 780 mg/kg

(OECD Test Guideline 402)

Acute toxicity estimate Dermal - 780 mg/kg

(ATE value derived from LD50/LC50 value)

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Remarks: (IUCLID)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

1-Chloro-4-phenoxybenzene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

The value is given in analogy to the following substances: Diphenyl ether

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

2,4-dinitrotoluene**Acute toxicity**

LD50 Oral - Rat - 268,0 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 268 mg/kg

(ATE value derived from LD50/LC50 value)

Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l - dust/mist

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Dermal - 300,1 mg/kg
(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

Remarks: (RTECS)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: (IUCLID)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

Remarks: (National Toxicology Program)

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: Positive results were obtained in some in vitro tests.

Remarks: (National Toxicology Program)

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

1,4-dichlorobenzene

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 5,07 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Species: Mouse - male and female - Bone marrow

Result: negative

Remarks: (ECHA)

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

1,2-Dichlorobenzene

Acute toxicity

LD50 Oral - Rat - male and female - 2.000 mg/kg

(OECD Test Guideline 401)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Acute toxicity estimate Oral - 2.000 mg/kg

(ATE value derived from LD50/LC50 value)

Acute toxicity estimate Inhalation - 4 h - 11,1 mg/l - vapor

(Expert judgment)

LD50 Dermal - Rabbit - > 10.000 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 24 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: positive

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Method: OECD Test Guideline 474

Species: Rat - male - Red blood cells (erythrocytes)

Result: negative

Method: OECD Test Guideline 489

Species: Rat - male - Bone marrow

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

chlorocresol**Acute toxicity**

LD50 Oral - Rat - male - 1.830 mg/kg

(OECD Test Guideline 401)

Remarks: (ECHA)

Acute toxicity estimate Oral - 1.830 mg/kg

(ATE value derived from LD50/LC50 value)

LC50 Inhalation - Rat - male and female - 4 h - > 583 mg/l - dust/mist

(OECD Test Guideline 403)

Remarks: (ECHA)

LD50 Dermal - Rat - female - > 2.000 mg/kg

(OECD Test Guideline 402)

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive after 1 to 4 hours of exposure

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage. - 72 h

(OECD Test Guideline 405)

Remarks: (ECHA)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: UDS (Unscheduled DNA synthesis assay)

Test system: rat hepatocytes

Result: negative

Test Type: Ames test

Test system: *S. typhimurium*

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation. - Respiratory Tract

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

2-nitrophenol

Acute toxicity

LD50 Oral - Rat - 334 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 334 mg/kg

(ATE value derived from LD50/LC50 value)

Acute toxicity estimate Inhalation - 4 h - 1,6 mg/l - dust/mist

(Expert judgment)

Symptoms: mucosal irritations, Cough, Shortness of breath

Acute toxicity estimate Dermal - 1.100,1 mg/kg

(Expert judgment)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 20 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No skin irritation - 72 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

1,2,3,4,5,5-Hexachlorocyclopentadiene

Acute toxicity

LD50 Oral - Rat - male and female - 1.400 mg/kg

(OECD Test Guideline 401)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

LC50 Inhalation - Rat - male - 4,0 h - 0,018 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 430,0 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: Severe skin irritation - 4 h

Remarks: (RTECS)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage.

(OECD Test Guideline 405)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Method: OECD Test Guideline 478

Species: Mouse - male and female

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

2,4-Dinitrophenol

Acute toxicity

Acute toxicity estimate Oral - 30 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Inhalation - 4,0 h - 0,51 mg/l - dust/mist

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Dermal - 300 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation

Remarks: (ECHA)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Oral - Causes damage to organs through prolonged or repeated exposure.

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

isophorone

Acute toxicity

LD50 Oral - Rat - male and female - 1.500 mg/kg

Remarks: (ECHA)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

LC50 Inhalation - Rat - male - 4 h - 7 mg/l - aerosol

Remarks: (ECHA)

LD50 Dermal - Rabbit - male and female - 1.200 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation.

(Draize Test)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (National Toxicology Program)

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Result: negative

Remarks: (ECHA)

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: negative

Remarks: (ECHA)

Test Type: unscheduled DNA synthesis assay

Test system: rat hepatocytes

Result: negative

Remarks: (ECHA)

Species: Drosophila melanogaster (vinegar fly) - male

Result: negative
Remarks: (ECHA)
Species: Mouse - male and female
Result: negative
Remarks: (ECHA)

Result: negative
Remarks: (National Toxicology Program)

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

2,6-Dinitrotoluene

Acute toxicity

LD50 Oral - Rat - 177,0 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 177 mg/kg
(ATE value derived from LD50/LC50 value)

Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l - dust/mist
(Expert judgment)

Acute toxicity estimate Dermal - 300 mg/kg
(Expert judgment)

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

Remarks: (RTECS)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

4-Bromophenyl phenyl ether**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Nitrobenzene**Acute toxicity**

Acute toxicity estimate Oral - 100 mg/kg

(Expert judgment)

Remarks: Blood: Methemoglobinemia-Carboxyhemoglobin.

(Regulation (EC) No 1272/2008, Annex VI)

LC50 Inhalation - Rat - 4 h - 2,81 mg/l - vapor

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.

Behavioral: Tremor.

(RTECS)

Acute toxicity estimate Inhalation - 2,81 mg/l - vapor
(ATE value derived from LD50/LC50 value)
LD50 Dermal - Rabbit - 760 mg/kg
Remarks: (ECHA)
Acute toxicity estimate Dermal - 760 mg/kg
(ATE value derived from LD50/LC50 value)

Skin corrosion/irritation

Skin - Rabbit
Result: No skin irritation - 24 h
Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit
Result: No eye irritation
Remarks: (ECHA)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse
Result: negative
(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test
Test system: Salmonella typhimurium
Result: negative
Remarks: (ECHA)
Method: OECD Test Guideline 474
Species: Mouse - male and female - Bone marrow
Result: negative
Method: OECD Test Guideline 486
Species: Rat - male - Liver cells
Result: negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Inhalation - Causes damage to organs through prolonged or repeated exposure.
- Blood
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

2,4,6,-Trichlorophenol

Acute toxicity

LD50 Oral - Rat - 820,0 mg/kg
Remarks: (RTECS)

Acute toxicity estimate Oral - 820 mg/kg
(ATE value derived from LD50/LC50 value)
Symptoms: Possible damages:, mucosal irritations
Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit
Result: Skin irritation - 24 h
Remarks: (RTECS)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute inhalation toxicity - Possible damages:, mucosal irritations

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Hexachlorobuta-1,3-diene

Acute toxicity

LD50 Oral - Rat - 82,0 mg/kg
LC50 Inhalation - Mouse - 370,0 mg/m3 - dust/mist
LD50 Dermal - Rabbit - 100,0 mg/kg

Skin corrosion/irritation

Skin - Rabbit
Result: Skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - Rabbit
Result: Mild eye irritation

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

3,5-Dinitro-2-hydroxytoluene**Acute toxicity**

LD50 Oral - Rat - 7,0 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 7 mg/kg

(ATE value derived from LD50/LC50 value)

Acute toxicity estimate Inhalation - 0,051 mg/l - dust/mist

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Dermal - 5 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Skin corrosion/irritation

Remarks: Causes skin irritation.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Risk of serious damage to eyes. - 24 h

(Draize Test)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

May cause allergic skin reaction. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Indeno[1,2,3-cd]pyrene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

2,4-xylenol; 2,4-dimethylphenol**Acute toxicity**

Acute toxicity estimate Oral - 100 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Symptoms: mucosal irritations, Cough, Shortness of breath

Acute toxicity estimate Dermal - 300 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Skin corrosion/irritation

Remarks: Causes skin burns.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

benzo[a]pyrene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Mouse

Result: Mild skin irritation

Remarks: (RTECS)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

May cause allergic skin reaction. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Germ cell mutagenicity

May cause genetic defects.

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

Remarks: (Lit.)

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Remarks: (National Toxicology Program)

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: positive

Remarks: (National Toxicology Program)

Species: Mouse - male - Bone marrow

Result: positive
Remarks: (National Toxicology Program)

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Dibenz[a,h]anthracene

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

N-Nitrosodimethylamine

Acute toxicity

LD50 Oral - Rat - 23 mg/kg

Remarks: (Lit.)

Acute toxicity estimate Oral - 23 mg/kg
(Calculation method)
LC50 Inhalation - Rat - 4 h - 0,24 mg/l - vapor
Remarks: (Lit.)
Acute toxicity estimate Inhalation - 0,24 mg/l - vapor
(Calculation method)
Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

- Liver

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

N-Nitroso dipropylamine

Acute toxicity

LD50 Oral - Rat - 480,0 mg/kg
Remarks: (RTECS)
Acute toxicity estimate Oral - 480 mg/kg
(Calculation method)
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Bis(2-chloro-1-methylethyl) ether**Acute toxicity**

LD50 Oral - Rat - 220 - 270 mg/kg

LC50 Inhalation - Rat - 8 h - 350 mg/l - vapor

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Bis-(2-chloroethoxy)methane**Acute toxicity**

LD50 Oral - Rat - 65,0 mg/kg

LC50 Inhalation - Rat - male and female - 4 h - 0,05 - 0,5 mg/l

LD50 Dermal - Rat - 1.071 - 1.174 mg/kg

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

(Draize Test)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization

in vivo assay - Mouse

Did not cause sensitization on laboratory animals.

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: in vitro test

Test system: S. typhimurium

Result: negative

Method: Mutagenicity (micronucleus test)

Species: Rat - male

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Pyrene

Acute toxicity

LD50 Oral - Rat - 2.700 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation.

Behavioral:Excitement.

Behavioral:Muscle contraction or spasticity.
(RTECS)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation

Remarks: (External MSDS)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: (External MSDS)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

Benzo[b]fluoranthene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

chrysene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

In vitro tests showed mutagenic effects

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

Remarks: (Lit.)

Carcinogenicity

Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Benzo[k]fluoranthene**Acute toxicity**

Oral: No data available

Inhalation: Irritating to respiratory system.

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Benzo[jk]fluorene**Acute toxicity**

LD50 Oral - Rat - 2.000 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 2.000 mg/kg
(ATE value derived from LD50/LC50 value)
Inhalation: No data available
LD50 Dermal - Rabbit - 3.180 mg/kg
Remarks: (RTECS)

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

anthracene

Acute toxicity

LD50 Oral - Rat - male and female - > 16.000 mg/kg

Remarks: (ECHA)

Symptoms: Nausea, Diarrhea, gastric pain

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 1.320 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

Remarks: (ECHA)

Remarks: Possible damages:

Dermatitis

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Respiratory or skin sensitization

Intracutaneous test - Guinea pig

Result: negative

Remarks: (ECHA)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: negative

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (ECHA)

Test Type: Chromosome aberration test in vitro

Test system: rat hepatocytes

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - Bone marrow

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - Nausea, Diarrhea, gastric pain

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Naphthalene**Acute toxicity**

Acute toxicity estimate Oral - 533 mg/kg

(ATE value derived from LD50/LC50 value)

LC50 Inhalation - Rat - male and female - 4 h - > 0,4 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 20.000 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 486

Species: Rat - male - Liver cells

Result: negative

Method: US-EPA

Species: Mouse - male and female - Bone marrow

Result: negative

Remarks: (ECHA)

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

Benzo[ghi]perylene

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

acenaphthene**Acute toxicity**

LD50 Oral - Rat - > 16.000 mg/kg

Remarks: (IUCLID)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (IUCLID)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

phenanthrene**Acute toxicity**

LD50 Oral - Mouse - 700 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Oral - 700 mg/kg
(ATE value derived from LD50/LC50 value)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli

Result: negative

Remarks: (Lit.)

(National Toxicology Program)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Benz[a]anthracene**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Fluorene

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: positive

Remarks: (Lit.)

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (Lit.)

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Azobenzene

Acute toxicity

LD50 Oral - Rat - 1.000 mg/kg

LC50 Inhalation - 4 h - 1,5 mg/l - dust/mist

Remarks: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.
In vitro tests showed mutagenic effects

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.
Possible human carcinogen

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

Benzyl butyl phthalate**Acute toxicity**

LD50 Oral - Rat - male and female - 2.330 mg/kg
(OECD Test Guideline 401)
Inhalation: No data available
LD50 Dermal - Rabbit - > 10.000 mg/kg
Remarks: (RTECS)

Skin corrosion/irritation

Skin - In vitro study
Result: No skin irritation
Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit
Result: No eye irritation - 24 h
Remarks: (ECHA)

Respiratory or skin sensitization

Sensitisation test: - Guinea pig
Result: negative
Remarks: (ECHA)

Germ cell mutagenicity

Test Type: Ames test

Test system: *S. typhimurium*

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Result: negative

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Method: US-EPA

Species: Mouse - male - Bone marrow

Result: Positive results were obtained in some in vivo tests.

Method: US-EPA

Species: Mouse - male - Bone marrow

Result: positive

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

Pentachlorophenol**Acute toxicity**

LD50 Oral - Rat - 27 mg/kg

Remarks: Vascular:BP elevation not characterized in autonomic section.

Endocrine:Hyperglycemia.

Nutritional and Gross Metabolic:Changes in:Body temperature increase.

LC50 Inhalation - 4 h - 0,051 mg/l - dust/mist

LC50 Inhalation - Rat - 355 mg/m³ - dust/mist

Remarks: Behavioral:Excitement.

Behavioral:Muscle contraction or spasticity.

Lungs, Thorax, or Respiration:Dyspnea.

Acute toxicity estimate Inhalation - 0,051 mg/l - dust/mist
(ATE value derived from LD50/LC50 value)

LD50 Dermal - Rat - 96,0 mg/kg

Remarks: Behavioral:Excitement.

Behavioral:Muscle contraction or spasticity.

Lungs, Thorax, or Respiration:Dyspnea.

Skin corrosion/irritation

Skin - Rabbit

Result: Open irritation test - 24,00 h

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Mild eye irritation - 24,00 h

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

The evidence for carcinogenicity of pentachlorophenol (PCP) is based on assays that utilized less than pure PCP. Contaminants of PCP include: tri- or tetra- chlorophenol, hexachlorobenzene, polychlorinated dibenzo-p-dioxins, or polychlorinated dibenzofurans. Indications are that positive evidence for carcinogenicity is from the contaminant(s) and not the PCP. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

carbazole**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

(OECD Test Guideline 404)

Skin - Rabbit

Result: No skin irritation

(Draize Test)

Remarks: (IUCLID)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Intracutaneous test - Guinea pig

Result: negative
Remarks: (ECHA)

Germ cell mutagenicity

Suspected of causing genetic defects.
Test Type: Ames test
Test system: Salmonella typhimurium
Result: negative
Remarks: (National Toxicology Program)
Test Type: unscheduled DNA synthesis assay
Test system: Liver
Result: negative
Method: OECD Test Guideline 478
Species: Mouse - male - Intrauterine
Result: positive

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Phenol

Acute toxicity

Acute toxicity estimate Oral - 100,1 mg/kg
(Expert judgment)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l - dust/mist
(Expert judgment)
Symptoms: Irritation, Lung edema
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
LD50 Dermal - Rat - female - 660 mg/kg
(OECD Test Guideline 402)
Acute toxicity estimate Dermal - 660 mg/kg
(ATE value derived from LD50/LC50 value)

Skin corrosion/irritation

Skin - In vitro study
Result: Causes burns.
(OECD Test Guideline 431)

Serious eye damage/eye irritation

Eyes - Rabbit
Result: Corrosive
(OECD Test Guideline 405)
Remarks: Causes serious eye damage.
Risk of blindness!

Respiratory or skin sensitization

Sensitisation test: - Guinea pig

Result: negative

Remarks: (IUCLID)

Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: positive

Test Type: Mutagenicity (mammal cell test): micronucleus.

Test system: Chinese hamster ovary cells

Result: positive

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute inhalation toxicity - Irritation, Lung edema

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

- Nervous system, Kidney, Liver, Skin

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard

No data available

SECTION 12: Ecological information**12.1 Toxicity****Mixture**

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties**Product:**

Assessment

: This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Components:**dibutyl phthalate:**

Assessment : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

Bis(2-ethylhexyl) phthalate:

Assessment : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

12.7 Other adverse effects

No data available

Components**Dichloromethane**

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 193,00 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 27 mg/l - 48 h (US-EPA)
Toxicity to bacteria	static test EC50 - activated sludge - 2.590 mg/l - 40 min (OECD Test Guideline 209)
Toxicity to fish(Chronic toxicity)	flow-through test LC50 - Pimephales promelas (fathead minnow) - 471 mg/l - 8 d Remarks: (ECHA)

benzene

Toxicity to fish	semi-static test LC50 - Oryzias latipes (Orange-red killifish) - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h (OECD Test Guideline 202) semi-static test NOEC - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 1.000 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Pseudokirchneriella subcapitata (green algae) - >= 1.000 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)

Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Pimephales promelas (fathead minnow) - 0,8 mg/l - 32 d Remarks: (ECHA)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test LC50 - Daphnia magna (Water flea) - > 100 mg/l - 21 d (OECD Test Guideline 211)
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bis(2-chloroethyl) ether

Toxicity to fish	semi-static test LC50 - Oryzias latipes - > 100 mg/l - 96 h (OECD Test Guideline 203)
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Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 240 mg/l - 48 h (US-EPA)
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Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 79,44 mg/l - 72 h (OECD Test Guideline 201)
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Toxicity to fish(Chronic toxicity)	flow-through test LC50 - Oryzias latipes - > 100 mg/l - 14 d (OECD Test Guideline 204)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test LC50 - Daphnia magna (Water flea) - > 100 mg/l - 21 d (OECD Test Guideline 211)
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dibutyl phthalate

Toxicity to fish	static test LC50 - Lepomis macrochirus (Bluegill sunfish) - ca. 0,48 mg/l - 96 h (OECD Test Guideline 203)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - ca. 2,99 mg/l - 48 h (US-EPA)
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Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) - 0,75 mg/l - 10 d (US-EPA) static test NOEC - Pseudokirchneriella subcapitata (green algae) - 0,39 mg/l - 10 d (US-EPA)
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Toxicity to bacteria	EC50 - Tetrahymena pyriformis - 2,2 mg/l - 24 h Remarks: (ECHA)
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Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Oncorhynchus mykiss (rainbow trout) - 0,1 mg/l - 99 d (US-EPA)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 0,158 mg/l - 21 d (OECD Test Guideline 211) Remarks: The value is given in analogy to the following
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substances:

The value is given in analogy to the following substances:
Bis(2-ethylhexyl) phthalate

Hexachloroethane

Toxicity to fish

LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0,84 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia
and other aquatic
invertebrates

LC50 - *Daphnia magna* (Water flea) - 1,36 mg/l - 48 h
Remarks: (ECOTOX Database)

Toxicity to algae

static test ErC50 - *Pseudokirchneriella subcapitata* - 0,88 mg/l - 72 h
(OECD Test Guideline 201)

Hexachlorobenzene

Toxicity to fish

LC50 - *Lepomis macrochirus* (Bluegill) - 7,6 mg/l - 96,0 h
NOEC - *Pimephales promelas* (fathead minnow) - > 0,0048 mg/l - 96,0 h

Toxicity to daphnia
and other aquatic
invertebrates

Immobilization EC50 - *Daphnia magna* (Water flea) - > 0,005 mg/l - 48 h

1,2,4-trichlorobenzene

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - *Daphnia magna* (Water flea) - 1,4 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - *Pseudokirchneriella subcapitata* (green algae) - 1,4 mg/l - 96 h
(US-EPA)

Bis(2-ethylhexyl) phthalate

Toxicity to fish

flow-through test LC50 - *Pimephales promelas* (fathead minnow) - > 0,67 mg/l - 96 h
(OECD Test Guideline 203)
Remarks: (above the solubility limit in the test medium)

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - *Daphnia magna* (Water flea) - > 0,16 mg/l - 48 h
Remarks: (ECOTOX Database)

Toxicity to algae

EC50 - *Pseudokirchneriella subcapitata* - > 0,003 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria

static test NOEC - activated sludge - 1.000 mg/l - 3 h
(OECD Test Guideline 209)

Toxicity to
fish(Chronic toxicity)

flow-through test NOEC - *Pimephales promelas* (fathead minnow) - 23,8 mg/l - 32 d
Remarks: (above the solubility limit in the test medium)

(ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 0,158 mg/l - 21 d (OECD Test Guideline 211) Remarks: (above the solubility limit in the test medium)
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2,4-dichlorophenol

Toxicity to fish	LC50 - Carassius auratus (goldfish) - 1,24 mg/l - 96 h Remarks: (ECOTOX Database)
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Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 2,8 mg/l - 48 h (OECD Test Guideline 202)
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Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - 3,44 mg/l - 72 h (OECD Test Guideline 201)
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1-Chloro-4-phenoxybenzene

Toxicity to fish	LC50 - Salvelinus fontinalis (Brook trout) - 0,73 mg/l - 96,0 h Remarks: (ECOTOX Database)
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2,4-dinitrotoluene

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 24,3 mg/l - 96 h Remarks: (ECOTOX Database)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 26,2 mg/l - 48 h Remarks: (ECOTOX Database)
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Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) - 1,6 mg/l - 96 h Remarks: (ECOTOX Database)
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Toxicity to fish(Chronic toxicity)	NOEC - Oryzias latipes (Orange-red killifish) - 1 mg/l - 28 d Remarks: (ECOTOX Database)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	static test NOEC - Daphnia magna (Water flea) - 3,2 mg/l - 21 d Remarks: (ECOTOX Database)
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1,4-dichlorobenzene

Toxicity to fish	flow-through test LC50 - Salmo gairdneri - 1,12 mg/l - 96 h Remarks: (ECHA)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0,7 mg/l - 48 h Remarks: (ECHA)
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Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 1,6 mg/l - 96 h (US-EPA)
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Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Jordanella floridae - 0,2 - 0,23 mg/l - 14 d (OECD Test Guideline 210)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 0,22 mg/l - 28 d Remarks: (ECHA)
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1,2-Dichlorobenzene

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1,58 mg/l - 96 h Remarks: (ECHA)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Ceriodaphnia dubia (water flea) - 0,66 mg/l - 48 h (US-EPA)
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Toxicity to algae	ErC50 - Pseudokirchneriella subcapitata (green algae) - 2,2 mg/l - 96 h (US-EPA)
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Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test EC50 - Daphnia magna (Water flea) - 0,55 mg/l - 14 d Remarks: (ECHA)
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chlorocresol

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0,917 mg/l - 96 h (US-EPA)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 2,29 mg/l - 48 h (US-EPA)
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Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 30,62 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Desmodesmus subspicatus (green algae) - 9,8 mg/l - 72 h (OECD Test Guideline 201)
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Toxicity to bacteria	static test EC50 - activated sludge - 41,4 mg/l - 3 h (OECD Test Guideline 209)
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Toxicity to fish(Chronic toxicity)	semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - 0,15 mg/l - 28 d
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(OECD Test Guideline 215)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 0,32 mg/l - 21 d (OECD Test Guideline 211)
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2-nitrophenol

No data available

1,2,3,4,5,5-Hexachlorocyclopentadiene

Toxicity to fish	static test LC50 - Lepomis macrochirus (Bluegill) - 0,13 mg/l - 96 h (OECD Test Guideline 203)
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Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0,04 mg/l - 48 h (OECD Test Guideline 202)
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2,4-Dinitrophenol

No data available

isophorone

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 228 mg/l - 96 h Remarks: (ECHA)
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Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h (US-EPA)
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Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - 475 mg/l - 72 h Remarks: (ECHA)
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Toxicity to bacteria	EC10 - Pseudomonas putida - 435 mg/l - 18 h Remarks: (External MSDS)
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Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Pimephales promelas (fathead minnow) - 4,2 - 15,6 mg/l - 32 d (US-EPA)
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2,6-Dinitrotoluene

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 17,2 - 50 mg/l - 96,0 h Remarks: (ECOTOX Database)
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Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 21,70 mg/l - 48 h Remarks: (ECOTOX Database)
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Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 11,00 - 20,00 mg/l - 72 h
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4-Bromophenyl phenyl ether

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 50,9 mg/l - 24,0 h
LC50 - *Lepomis macrochirus* (Bluegill) - 9,6 mg/l - 48,0 h

Nitrobenzene

Toxicity to fish flow-through test LC50 - *Danio rerio* (zebra fish) - 92 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - *Daphnia magna* (Water flea) - 35 mg/l - 48 h
Remarks: (ECHA)

Toxicity to algae static test ErC50 - *Chlorella pyrenoidosa* - 18 mg/l - 96 h
(OECD Test Guideline 201)

Toxicity to bacteria static test EC20 - activated sludge - 1.000 mg/l - 30 min
(OECD Test Guideline 209)

Toxicity to fish(Chronic toxicity) flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0,002 mg/l - 23 d
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test NOEC - *Daphnia magna* (Water flea) - 2,6 mg/l - 21 d

2,4,6,-Trichlorophenol

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill sunfish) - 0,32 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 2,2 mg/l - 48 h
Remarks: (ECOTOX Database)

Hexachlorobuta-1,3-diene

Toxicity to fish LC50 - *Pimephales promelas* (fathead minnow) - 0,09 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia* - 0,5 mg/l - 24 h

Toxicity to fish(Chronic toxicity) LOEC - *Pimephales promelas* (fathead minnow) - 0,013 mg/l - 28 d

3,5-Dinitro-2-hydroxytoluene

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 0,23 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - Daphnia pulex (Water flea) - 0,14 mg/l - 48 h
Remarks: (ECOTOX Database)

Indeno[1,2,3-cd]pyrene

No data available

2,4-xyleneol; 2,4-dimethylphenol

Toxicity to daphnia
and other aquatic
invertebrates

static test EC50 - Daphnia magna (Water flea) - 4,21 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - Pseudokirchneriella subcapitata - 13 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to
fish(Chronic toxicity)

NOEC - Pimephales promelas (fathead minnow) - 1,92 mg/l - 32 d
Remarks: (ECOTOX Database)

benzo[a]pyrene

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - Daphnia magna (Water flea) - 0,25 mg/l - 48 h
Remarks: (above the solubility limit in the test medium)
(ECOTOX Database)

Toxicity to algae

static test ErC50 - Scenedesmus acutus - 0,005 mg/l - 72 h
Remarks: (ECOTOX Database)

Dibenz[a,h]anthracene

No data available

N-Nitrosodimethylamine

Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 832,00 - 1.062,00 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to algae

EC50 - Pseudokirchneriella subcapitata (green algae) - 4,00 mg/l - 96 h
Remarks: (ECOTOX Database)

N-Nitroso dipropylamine

No data available

Bis(2-chloro-1-methylethyl) ether

No data available

Bis-(2-chloroethoxy)methane

Toxicity to fish	static test LC50 - Danio rerio (zebra fish) - 50,2 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 190 mg/l - 48 h
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - 150 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to fish(Chronic toxicity)	NOEC - Danio rerio (zebra fish) - 2,4 mg/l - 28 d
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	NOEC - Daphnia - 0,99 mg/l - 21 d (OECD Test Guideline 211)

Pyrene

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - > 2 mg/l - 96 h Remarks: (External MSDS)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0,002 - 0,003 mg/l - 48 h Remarks: (External MSDS)
Toxicity to algae	static test NOEC - Raphidocelis subcapitata (freshwater green alga) - 0,0012 mg/l - 72 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test EC10 - Ceriodaphnia dubia (water flea) - 0,002 mg/l - 7 d Remarks: (ECHA)

Benzo[b]fluoranthene

No data available

chrysene

No data available

Benzo[k]fluoranthene

No data available

Benzo[jk]fluorene

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0,0077 mg/l - 96 h Remarks: (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0,117 mg/l - 48 h Remarks: (ECOTOX Database)

Toxicity to fish(Chronic toxicity) flow-through test NOEC - Pimephales promelas (fathead minnow) - 0,0014 mg/l - 32 d
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) Reproduction Test NOEC - Daphnia magna (Water flea) - 0,0014 mg/l - 21 d
Remarks: (ECOTOX Database)

anthracene

Toxicity to fish flow-through test LC50 - Lepomis macrochirus (Bluegill) - 0,002 mg/l - 96,0 h
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia magna (Water flea) - 0,036 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test EC10 - Ceriodaphnia dubia (water flea) - > 0,0034 mg/l - 7 d
Remarks: (ECHA)

Naphthalene

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1,6 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 2,16 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (green algae) - 2,96 mg/l - 4 h
(US-EPA)
Remarks: (ECHA)

Toxicity to fish(Chronic toxicity) flow-through test LC50 - Oncorhynchus kisutch (coho salmon) - 2,1 mg/l - 96 h
Remarks: (ECHA)

flow-through test NOEC - Oncorhynchus kisutch (coho salmon) - 0,37 mg/l - 40 Days
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) static test NOEC - Daphnia pulex (Water flea) - 0,59 mg/l - 125 d
Remarks: (ECHA)

Benzo[ghi]perylene

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 0,0002 mg/l -

and other aquatic
invertebrates 48 h

Toxicity to algae Growth rate EC10 - *Pseudokirchneriella subcapitata* (green algae) - > 0,0016 mg/l - 72 h

acenaphthene

Toxicity to fish flow-through test LC50 - *Salmo trutta* - 0,58 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 3,45 mg/l - 48 h
Remarks: (IUCLID)

Toxicity to algae EC50 - *Pseudokirchneriella subcapitata* (green algae) - 0,52 - 0,53 mg/l - 96 h
Remarks: (ECOTOX Database)

phenanthrene

Toxicity to fish flow-through test LC50 - *Lepomis macrochirus* (Bluegill sunfish) - 0,234 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 0,212 mg/l - 48 h
Remarks: (ECOTOX Database)

Toxicity to fish(Chronic toxicity) flow-through test NOEC - *Oncorhynchus mykiss* (rainbow trout) - 0,005 mg/l - 90 d
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) NOEC - *Daphnia magna* (Water flea) - 0,048 mg/l - 21 d
Remarks: (ECOTOX Database)

Benz[a]anthracene

No data available

Fluorene

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia* - 0,49 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - algae - 0,76 mg/l - 72 h
(OECD Test Guideline 201)
static test NOEC - algae - 0,074 mg/l - 72 h
(OECD Test Guideline 201)

Azobenzene

Toxicity to fish LC50 - *Oryzias latipes* - 0,5 mg/l - 48,0 h

Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 5,00 mg/l - 24 h
	Immobilization EC50 - Daphnia - 0,13 mg/l - 24 h
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 1,70 - 2,50 mg/l - 48 h
Benzyl butyl phthalate	
Toxicity to fish	flow-through test LC50 - Fish - 0,51 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	flow-through test LC50 - Americamysis bahia (Mysid) - > 0,74 mg/l - 48 h (US-EPA)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 1,5 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Pimephales promelas (fathead minnow) - 0,064 - 0,067 mg/l - 126 Days (US-EPA)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 0,28 mg/l - 21 d Remarks: (ECHA)
Pentachlorophenol	
Toxicity to fish	LC50 - Cyprinodon variegatus (sheepshead minnow) - 0,16 - 0,5 mg/l - 96,0 h LC50 - Carassius auratus (goldfish) - 0,16 - 0,38 mg/l - 96,0 h LC50 - Oncorhynchus mykiss (rainbow trout) - 0,075 mg/l - 96,0 h NOEC - other fish - 0,01 mg/l - 24,0 h LOEC - other fish - 0,1 mg/l - 24,0 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0,30 - 1,30 mg/l - 48 h
Toxicity to algae	EC50 - Chlorella vulgaris (Fresh water algae) - 10,30 mg/l - 96 h Growth inhibition EC50 - Scenedesmus quadricauda (Green algae) - 0,08 mg/l - 96 h
Toxicity to fish(Chronic toxicity)	Growth inhibition NOEC - Pimephales promelas (fathead minnow) - 0,056 mg/l - 28 d Growth inhibition LOEC - Pimephales promelas (fathead minnow) - 0,056 mg/l - 28 d
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	Growth inhibition LOEC - Daphnia magna (Water flea) - 0,56 mg/l - 21 d

toxicity)

carbazole

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0,93 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 2,3 - 4,9 mg/l - 48 h
Remarks: (ECOTOX Database)

Phenol

Toxicity to fish flow-through test LC50 - Onchorhynchus clarki - 8,9 mg/l - 96 h
(US-EPA)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Ceriodaphnia dubia (water flea) - 3,1 mg/l - 48 h
(US-EPA)

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (algae) - 61,1 mg/l - 96 h
(US-EPA)

Toxicity to bacteria static test IC50 - microorganisms - 21 mg/l - 24 h
Remarks: (ECHA)

Toxicity to fish(Chronic toxicity) semi-static test NOEC - Fish - 0,077 mg/l - 60 d
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test NOEC - Daphnia magna (Water flea) - 0,16 mg/l - 16 d
Remarks: (ECHA)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1993

IMDG: 1993

IATA: 1993

14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, N.O.S. (benzene, 1,3-dichlorobenzene, 2-chlorophenol)

IMDG: FLAMMABLE LIQUID, N.O.S. (benzene, 1,3-dichlorobenzene, 2-chlorophenol)

IATA: Flammable liquid, n.o.s. (benzene, 1,3-dichlorobenzene, 2-chlorophenol)

14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/E)

Further information : No data available

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: benzene

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: benzene
Benzo[b]fluoranthene
chrysene
Benzo[k]fluoranthene
benzo[a]pyrene
Dibenz[a,h]anthracene
Benz[a]anthracene
Azobenzene
Hexachlorobenzene
2,4-dinitrotoluene
N-Nitrosodimethylamine
N-Nitroso dipropylamine
2,6-Dinitrotoluene

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: benzene
benzo[a]pyrene

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: Pyrene
chrysene
Benzo[k]fluoranthene
benzo[a]pyrene
Benzo[jk]fluorene
anthracene
Benzo[ghi]perylene

phenanthrene
Benz[a]anthracene
Benzyl butyl phthalate
dibutyl phthalate
Bis(2-ethylhexyl) phthalate
2,4-dinitrotoluene
Nitrobenzene

This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006.

Listed substance / Sunset Date	: Benzyl butyl phthalate / 21.02.2015 dibutyl phthalate / 21.02.2015 Bis(2-ethylhexyl) phthalate / 21.02.2015 2,4-dinitrotoluene / 21.08.2015
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After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

Regulation (EU) No 2024/590 on substances that deplete the ozone layer	: Dichloromethane
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Hexachloroethane
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Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Benzo[b]fluoranthene Benzo[k]fluoranthene Pentachlorophenol Hexachlorobenzene Hexachlorobuta-1,3-diene Indeno[1,2,3-cd]pyrene
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: 1,2,4-trichlorobenzene
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: chrysene
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Benzo[k]fluoranthene
--	------------------------

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: benzo[a]pyrene
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Dibenzo[a,h]anthracene
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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Benz[a]anthracene

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Dichloromethane

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: benzene
Benzo[b]fluoranthene
chrysene
Benzo[k]fluoranthene
benzo[a]pyrene
Dibenz[a,h]anthracene
Benz[a]anthracene

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Benzo[b]fluoranthene

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

P5c FLAMMABLE LIQUIDS

P5c FLAMMABLE LIQUIDS

E1 ENVIRONMENTAL HAZARDS

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements

H201	Explosive; mass explosion hazard.
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H228	Flammable solid.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H360FD	May damage fertility. May damage the unborn child.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH018	In use may form flammable/explosive vapor-air mixture.
EUH044	Risk of explosion if heated under confinement.

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Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture

Flam. Liq.2	H225
Acute Tox.4	H302
Acute Tox.4	H332
Skin Irrit.2	H315
Eye Irrit.2	H319
Muta.1B	H340
Carc.1A	H350
STOT SE3	H336
STOT RE1	H372
Asp. Tox.1	H304
Aquatic Acute1	H400
Aquatic Chronic1	H410

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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