SAFETY DATA SHEET

Version 6.12
Revision Date 07/28/2022
Print Date 11/16/2022

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

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

Identified uses : Research and development as defined in 40 C.F.R. § 751.403. See section 15 for more information.This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

Uses advised against : For R&D use only. Not for pharmaceutical, household or other uses.This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 1B), H340
Carcinogenicity (Category 1A), H350
Reproductive toxicity (Category 1B), H360
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Specific target organ toxicity - repeated exposure (Category 1), Blood, H372
Aspiration hazard (Category 1), H304
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

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

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statement(s)

H225	Highly flammable liquid and vapor.
H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs (Blood) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe mist or vapors.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
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/ shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable

	for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P331	Do NOT induce vomiting.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Sensitizing components:
benzo[a]pyrene
1-Chloro-4-phenoxybenzene
1,2-Dichlorobenzene
chlorocresol
4-Bromophenyl phenyl ether
3,5-Dinitro-2-hydroxytoluene
May produce an allergic reaction.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
Dichloromethane			
CAS-No. EC-No. Index-No. Registration number	75-09-2 200-838-9 602-004-00-3 01-2119480404-41-XXXX	Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; H315, H319, H351, H336 Concentration limits: 20 %: STOT SE 3, H336;	>= 50 - < 70 %
benzene			
CAS-No. EC-No. Index-No. Registration number	71-43-2 200-753-7 601-020-00-8 01-2119447106-44-XXXX	Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2A; Muta. 1B; Carc. 1A; STOT RE 1; Asp. Tox. 1; Aquatic Acute 2; Aquatic Chronic 3; H225, H315, H319, H340, H350, H372, H304, H401, H412	>= 30 - < 50 %
dibutyl phthalate			
CAS-No. EC-No.	84-74-2 201-557-4	Repr. 1B; Aquatic Acute 1; Aquatic Chronic 2; H360,	>= 0.1 - < 1 %

Index-No. Registration number	607-318-00-4 01-2119493042-44-XXXX	H400, H411 M-Factor - Aquatic Acute: 1	
Hexachloroethane			
CAS-No. EC-No.	67-72-1 200-666-4	Eye Irrit. 2A; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H351, H400, H410 M-Factor - Aquatic Acute: 1 M-Factor - Aquatic Chronic: 1	>= 0.1 - < 1 %
Hexachlorobenzene			
CAS-No. EC-No. Index-No.	118-74-1 204-273-9 602-065-00-6	Carc. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H350, H372, H400, H410 M-Factor - Aquatic Acute: 100	>= 0.1 - < 1 %
1,2,4-trichlorobenzene			
CAS-No. EC-No. Index-No. Registration number	120-82-1 204-428-0 602-087-00-6 01-2119421789-28-XXXX	Acute Tox. 4; Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H400, H410 M-Factor - Aquatic Acute: 10	>= 0.1 - < 1 %
Bis(2-ethylhexyl) phthalate			
CAS-No. EC-No. Index-No. Registration number	117-81-7 204-211-0 607-317-00-9 01-2119484611-38-XXXX	Repr. 1B; H360	>= 0.1 - < 1 %
2,4-dichlorophenol			
CAS-No. EC-No. Index-No.	120-83-2 204-429-6 604-011-00-7	Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Carc. 2; Aquatic Acute 2; Aquatic Chronic 2; H302, H311, H314, H318, H351, H401, H411	>= 0.1 - < 1 %
1-Chloro-4-phenoxybenzene			
CAS-No. EC-No.	7005-72-3 230-281-7	Eye Irrit. 2A; Aquatic Acute 1; Aquatic Chronic 1; H319, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	>= 0.1 - < 1 %
2,4-dinitrotoluene			
CAS-No. EC-No.	121-14-2 204-450-0	Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT	>= 0.1 - < 1 %

Index-No.	609-007-00-9	RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H331, H311, H341, H350, H361, H373, H400, H410 M-Factor - Aquatic Acute: 10	
1,4-dichlorobenzene			
CAS-No. EC-No. Index-No.	106-46-7 203-400-5 602-035-00-2	Eye Irrit. 2A; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H351, H400, H410 M-Factor - Aquatic Acute: 1	>= 0.1 - < 1 %
N-Nitrosodimethylamine			
CAS-No. EC-No. Index-No.	62-75-9 200-549-8 612-077-00-3	Flam. Liq. 4; Acute Tox. 2; Acute Tox. 1; Carc. 1B; STOT RE 1; Aquatic Acute 2; Aquatic Chronic 2; H227, H300, H330, H350, H372, H401, H411 Concentration limits: >= 0.001 %: Carc. 1B, H350;	>= 0.1 - < 1 %
N-Nitroso dipropylamine			
CAS-No. EC-No. Index-No.	621-64-7 210-698-0 612-098-00-8	Acute Tox. 4; Carc. 1B; Aquatic Chronic 2; H302, H350, H411 Concentration limits: >= 0.001 %: Carc. 1B, H350;	>= 0.1 - < 1 %
1,2-Dichlorobenzene			
CAS-No. EC-No. Index-No.	95-50-1 202-425-9 602-034-00-7	Flam. Liq. 4; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H227, H302, H332, H315, H319, H317, H335, H400, H410 M-Factor - Aquatic Acute: 1	>= 0.1 - < 1 %
chlorocresol			
CAS-No. EC-No. Index-No. Registration number	59-50-7 200-431-6 604-014-00-3 01-2119938953-25-XXXX	Acute Tox. 4; Skin Corr. 1C; Eye Dam. 1; Skin Sens. 1B; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 3; H302, H312, H314, H318, H317, H335, H400, H412 M-Factor - Aquatic Acute: 10	>= 0.1 - < 1 %

2-nitrophenol			
CAS-No. EC-No.	88-75-5 201-857-5	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H312, H400, H410	>= 0.1 - < 1 %
1,2,3,4,5,5-Hexachlorocyclopentadiene			
CAS-No. EC-No. Index-No.	77-47-4 201-029-3 602-078-00-7	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 M-Factor - Aquatic Acute: 100 M-Factor - Aquatic Chronic: 10	>= 0.1 - < 1 %
2,4-Dinitrophenol			
CAS-No. EC-No. Index-No.	51-28-5 200-087-7 609-041-00-4	Expl. 1.1; Acute Tox. 2; Acute Tox. 3; STOT RE 1; Aquatic Acute 1; H201, H300, H331, H311, H372, H400	>= 0.1 - < 1 %
isophorone			
CAS-No. EC-No. Index-No.	78-59-1 201-126-0 606-012-00-8	Acute Tox. 4; Eye Irrit. 2A; Carc. 2; STOT SE 3; H302, H312, H319, H351, H335 Concentration limits: >= 10 %: STOT SE 3, H335;	>= 0.1 - < 1 %
2,6-Dinitrotoluene			
CAS-No. EC-No. Index-No.	606-20-2 210-106-0 609-049-00-8	Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT RE 2; Aquatic Acute 3; Aquatic Chronic 3; H301, H331, H311, H341, H350, H361, H373, H402, H412	>= 0.1 - < 1 %
4-Bromophenyl phenyl ether			
CAS-No. EC-No.	101-55-3 202-952-4	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10	>= 0.1 - < 1 %
Nitrobenzene			
CAS-No. EC-No. Index-No. Registration number	98-95-3 202-716-0 609-003-00-7 01-2119449806-28-XXXX	Flam. Liq. 4; Acute Tox. 3; Carc. 2; Repr. 1B; STOT RE 1; Aquatic Acute 3; Aquatic Chronic 3; H227, H301, H331, H311, H351, H360, H372, H402, H412	>= 0.1 - < 1 %

2,4,6,-Trichlorophenol			
CAS-No. EC-No. Index-No.	88-06-2 201-795-9 604-018-00-5	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H319, H351, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	>= 0.1 - < 1 %
Hexachlorobuta-1,3-diene			
CAS-No. EC-No.	87-68-3 201-765-5	Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H310, H315, H319, H351, H400, H410	>= 0.1 - < 1 %
3,5-Dinitro-2-hydroxytoluene			
CAS-No. EC-No. Index-No.	534-52-1 208-601-1 609-020-00-X	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: 10 M-Factor - Aquatic Chronic: 1	>= 0.1 - < 1 %
Indeno[1,2,3-cd]pyrene			
CAS-No. EC-No.	193-39-5 205-893-2	Carc. 2; H351	>= 0.1 - < 1 %
Bis(2-chloro-1-methylethyl) ether			
CAS-No. EC-No.	108-60-1 203-598-3	Flam. Liq. 4; Acute Tox. 3; Acute Tox. 4; H227, H301, H332	>= 0.1 - < 1 %
Bis-(2-chloroethoxy)methane			
CAS-No. EC-No.	111-91-1 203-920-2	Acute Tox. 3; Acute Tox. 4; STOT SE 1; STOT RE 2; H301, H312, H370, H373	>= 0.1 - < 1 %
2-chlorophenol			
CAS-No. EC-No. Index-No. Registration number	95-57-8 202-433-2 604-008-00-0 01-2120242101-78-XXXX	Flam. Liq. 4; Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; Aquatic Chronic 2; H227, H302, H331,	>= 0.1 - < 1 %

		H311, H314, H318, H401, H411	
Pyrene			
CAS-No. EC-No.	129-00-0 204-927-3	Carc. 1A; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410 M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	>= 0.1 - < 1 %
Benz[e]acephenanthrylene			
CAS-No. EC-No. Index-No.	205-99-2 205-911-9 601-034-00-4	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410 M-Factor - Aquatic Acute: 10	>= 0.1 - < 1 %
chrysene			
CAS-No. EC-No. Index-No.	218-01-9 205-923-4 601-048-00-0	Muta. 2; Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H341, H350, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 10	>= 0.1 - < 1 %
Benzo[k]fluoranthene			
CAS-No. EC-No. Index-No.	207-08-9 205-916-6 601-036-00-5	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 10	>= 0.1 - < 1 %
benzo[a]pyrene			
CAS-No. EC-No. Index-No.	50-32-8 200-028-5 601-032-00-3	Skin Sens. 1; Muta. 1B; Carc. 1B; Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H317, H340, H350, H360, H400, H410 Concentration limits: >= 0.01 %: Carc. 1B, H350; M-Factor - Aquatic Acute: 10	>= 0.1 - < 1 %
Benzo[jk]fluorene			
CAS-No. EC-No.	206-44-0 205-912-4	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H400, H410 M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	>= 0.1 - < 1 %
Dibenz[a,h]anthracene			
CAS-No.	53-70-3	Carc. 1B; Aquatic Acute 1;	>= 0.1 - < 1

EC-No. Index-No.	200-181-8 601-041-00-2	Aquatic Chronic 1; H350, H400, H410 Concentration limits: >= 0.01 %: Carc. 1B, H350; M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10	%
anthracene			
CAS-No. EC-No.	120-12-7 204-371-1	Eye Irrit. 2A; Carc. 1A; Aquatic Acute 1; Aquatic Chronic 1; H319, H350, H400, H410 M-Factor - Aquatic Acute: 1,000 M-Factor - Aquatic Chronic: 100	>= 0.1 - < 1 %
Naphthalene			
CAS-No. EC-No. Index-No.	91-20-3 202-049-5 601-052-00-2	Flam. Sol. 2; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H228, H302, H351, H400, H410	>= 0.1 - < 1 %
Benzo[ghi]perylene			
CAS-No. EC-No.	191-24-2 205-883-8	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 1,000 - Aquatic Chronic: 1,000	>= 0.1 - < 1 %
acenaphthene			
CAS-No. EC-No.	83-32-9 201-469-6	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	>= 0.1 - < 1 %
phenanthrene			
CAS-No. EC-No.	85-01-8 201-581-5	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 0.1 - < 1 %
Benz[a]anthracene			
CAS-No. EC-No. Index-No.	56-55-3 200-280-6 601-033-00-9	Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10	>= 0.1 - < 1 %
Fluorene			
CAS-No. EC-No.	86-73-7 201-695-5	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute:	>= 0.1 - < 1 %

		1	
Azobenzene			
CAS-No. EC-No. Index-No.	103-33-3 203-102-5 611-001-00-6	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	>= 0.1 - < 1 %
Benzyl butyl phthalate			
CAS-No. EC-No. Index-No.	85-68-7 201-622-7 607-430-00-3	Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H360, H400, H410 M-Factor - Aquatic Acute: 1	>= 0.1 - < 1 %
Pentachlorophenol			
CAS-No. EC-No. Index-No.	87-86-5 201-778-6 604-002-00-8	Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 2; H301, H330, H311, H315, H319, H351, H335, H400, H411 M-Factor - Aquatic Acute: 10	>= 0.1 - < 1 %
carbazole			
CAS-No. EC-No.	86-74-8 201-696-0	Muta. 2; Carc. 2; Aquatic Chronic 4; H341, H351, H413	>= 0.1 - < 1 %
Phenol			
CAS-No. EC-No. Index-No. Registration number	108-95-2 203-632-7 604-001-00-2 01-2119471329-32-XXXX	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Muta. 2; STOT RE 2; Aquatic Acute 2; Aquatic Chronic 2; H301, H331, H311, H314, H318, H341, H373, H401, H411 Concentration limits: >= 3 %: Skin Corr. 1B, H314; 1 - < 3 %: Skin Irrit. 2, H315; 1 - < 3 %: Eye Irrit. 2, H319;	>= 0.1 - < 1 %
2,4-xylenol; 2,4-dimethylphenol			
CAS-No. EC-No. Index-No.	105-67-9 203-321-6 604-006-00-X	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; H301, H311, H314, H318, H401	>= 0.1 - < 1 %

bis(2-chloroethyl) ether			
CAS-No. EC-No. Index-No.	111-44-4 203-870-1 603-029-00-2	Flam. Liq. 3; Acute Tox. 2; Acute Tox. 1; Carc. 2; H226, H300, H330, H310, H351	>= 0.1 - < 1 %

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

Component	CAS-No.	Value	Control parameters	Basis
Dichloromethane	75-09-2	TWA	50 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Confirmed animal carcinogen with unknown relevance to humans		
		Potential Occupational Carcinogen		
		PEL	25 ppm	OSHA Specifically Regulated Chemicals/Carcinogens
		OSHA specifically regulated carcinogen		
		STEL	125 ppm	OSHA Specifically Regulated Chemicals/Carcinogens
		OSHA specifically regulated carcinogen		
		PEL	25 ppm 87 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		STEL	125 ppm 435 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
benzene	71-43-2	TWA	0.5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Leukemia Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed human carcinogen Danger of cutaneous absorption		
		STEL	2.5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Leukemia Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed human carcinogen Danger of cutaneous absorption		
		TWA	10 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Z37.40-1969		
		CEIL	25 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Z37.40-1969		
		Peak	50 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Z37.40-1969		
		See 1910.1028. See Table Z-2 for the limits applicable in the operations or sectors excluded in 1910.1028 The final benzene standard in 1910.1028 applies to all		

		occupational exposures to benzene except some subsegments of industry where exposures are consistently under the action level (i.e., distribution and sale of fuels, sealed containers and pipelines, coke production, oil and gas drilling and production, natural gas processing, and the percentage exclusion for liquid mixtures); for the excepted subsegments, the benzene limits in Table Z-2 apply.		
		TWA	0.1 ppm	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen See Appendix A		
		ST	1 ppm	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen See Appendix A		
3,5-Dinitro-2-hydroxytoluene	534-52-1	TWA	0.2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Danger of cutaneous absorption		
		TWA	0.2 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
Hexachlorobuta-1,3-diene	87-68-3	TWA	0.02 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	0.02 ppm 0.24 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
		PEL	0.02 ppm 0.24 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
Nitrobenzene	98-95-3	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		

		TWA	1 ppm 5 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	1 ppm 5 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	1 ppm 5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
2,6-Dinitrotoluene	606-20-2	TWA	1.5 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
isophorone	78-59-1	C	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans		
		TWA	4 ppm 23 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	25 ppm 140 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	4 ppm 23 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
1,2,3,4,5,5-Hexachlorocyclopentadiene	77-47-4	TWA	0.01 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		TWA	0.01 ppm 0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		PEL	0.01 ppm 0.11 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
1,2-Dichlorobenzene	95-50-1	TWA	25 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		STEL	50 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		

		C	50 ppm 300 mg/m3	USA. NIOSH Recommended Exposure Limits
		C	50 ppm 300 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	50 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
		PEL	25 ppm 150 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
1,4-dichlorobenzene	106-46-7	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans		
		Potential Occupational Carcinogen		
		TWA	75 ppm 450 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	10 ppm 60 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		C	200 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		STEL	110 ppm 675 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
2,4-dinitrotoluene	121-14-2	TWA	1.5 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
2,4-dichlorophenol	120-83-2	TWA	1 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
		Skin		
Bis(2-ethylhexyl) phthalate	117-81-7	TWA	5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans		
		TWA	5 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		

		ST	10 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		TWA	5 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
1,2,4-trichlorobenzene	120-82-1	C	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		C	5 ppm 40 mg/m3	USA. NIOSH Recommended Exposure Limits
		C	5 ppm 40 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Hexachlorobenzene	118-74-1	TWA	0.002 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		PEL	0.002 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
Hexachloroethane	67-72-1	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	1 ppm 10 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
		TWA	1 ppm 10 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	1 ppm 10 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

dibutyl phthalate	84-74-2	TWA	5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	5 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	5 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
bis(2-chloroethyl) ether	111-44-4	TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen Danger of cutaneous absorption		
		STEL	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen Danger of cutaneous absorption		
		TWA	5 ppm 30 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
		ST	10 ppm 60 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
		C	15 ppm 90 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	5 ppm 30 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
		STEL	10 ppm 60 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
2,4-xylenol; 2,4-dimethylphenol	105-67-9	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Dermal Sensitization Confirmed animal carcinogen with unknown relevance to humans		
Phenol	108-95-2	TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen Danger of cutaneous absorption		

		TWA	5 ppm 19 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		C	15.6 ppm 60 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	5 ppm 19 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	5 ppm 19 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
carbazole	86-74-8	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Pentachlorophenol	87-86-5	TWA	0.5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		STEL	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	0.5 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	0.5 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		PEL	0.5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
phenanthrene	85-01-8	TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		OSHA specifically regulated carcinogen		
		TWA	0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		

		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Benzo[ghi]perylene	191-24-2	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Naphthalene	91-20-3	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	10 ppm 50 mg/m3	USA. NIOSH Recommended Exposure Limits
		ST	15 ppm 75 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	10 ppm 50 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	0.1 ppm 0.5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		
anthracene	120-12-7	TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		OSHA specifically regulated carcinogen		
		TWA	0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		

		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Dibenz[a,h]anthracene	53-70-3	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Benzo[jk]fluorene	206-44-0	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
benzo[a]pyrene	50-32-8	TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		OSHA specifically regulated carcinogen		
		TWA	0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Suspected human carcinogen		
Benzo[k]fluoranthene	207-08-9	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Confirmed animal carcinogen with unknown relevance to humans		
chrysene	218-01-9	TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		OSHA specifically regulated carcinogen		
		TWA	0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Suspected human carcinogen		

Benz[e]acephenanthrylene	205-99-2	PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Pyrene	129-00-0	TWA	0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		OSHA specifically regulated carcinogen		
		TWA	0.1 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen		
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	0.2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Dichloromethane	75-09-2	Dichloromethane	0.3 mg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
	Remarks	End of shift (As soon as possible after exposure ceases)			
Nitrobenzene	98-95-3	Methemoglobin	1.5% Hb	In blood	ACGIH - Biological Exposure Indices (BEI)
		During or at the end of the shift			
Phenol	108-95-2	Phenol	250mg/g Creatinine	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift (As soon as possible after exposure ceases)			
Pentachlorophenol	87-86-5	pentachlorophenol		Urine	ACGIH - Biological Exposure Indices (BEI)
		Prior to last shift of workweek			
phenanthrene	85-01-8	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			

Benzo[ghi]perylene	191-24-2	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
Naphthalene	91-20-3	1-Naphthol + 2-Naphthol			ACGIH - Biological Exposure Indices (BEI)
		End of shift (As soon as possible after exposure ceases)			
anthracene	120-12-7	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
Dibenz[a,h]anthracene	53-70-3	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
Benzo[jk]fluorene	206-44-0	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
benzo[a]pyrene	50-32-8	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)

		End of shift at end of workweek			
Benzo[k]fluoranthene	207-08-9	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
chrysene	218-01-9	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
Benz[e]acephenanthrylene	205-99-2	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
Pyrene	129-00-0	1-Hydroxypyrene	2.5 µg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			
		3-hydroxybenzo(a)pyrene		Urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift at end of workweek			

8.2 Exposure controls

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

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.

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)	Appearance	Form: liquid
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	Melting point/range: 5 °C (41 °F)
f)	Initial boiling point and boiling range	80.1 °C 176.2 °F at 1,013 hPa
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 8 %(V) Lower explosion limit: 1.3 %(V)
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	0.879 g/cm3 at 20 °C (68 °F)
	Relative density	No data available
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	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 - 1,136 mg/kg
(Calculation method)
Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Inhalation: No data available

Acute toxicity estimate Inhalation - 4 h - 2.12 mg/l - dust/mist(Calculation method)

Symptoms: Possible symptoms:, mucosal irritations
Dermal: No data available

Acute toxicity estimate Dermal - 1,706 mg/kg
(Calculation method)

Skin corrosion/irritation
Mixture causes skin irritation.

Serious eye damage/eye irritation
Mixture causes serious eye irritation.

Respiratory or skin sensitization
Mixture may cause an allergic skin reaction.

Germ cell mutagenicity
Possible mutagen

Carcinogenicity

Possible human carcinogen

IARC:	1 - Group 1: Carcinogenic to humans (benzene)
IARC:	1 - Group 1: Carcinogenic to humans (benzo[a]pyrene)
IARC:	1 - Group 1: Carcinogenic to humans (Pentachlorophenol)
IARC:	2A - Group 2A: Probably carcinogenic to humans (Dichloromethane)
IARC:	2A - Group 2A: Probably carcinogenic to humans (Dibenz[a,h]anthracene)
IARC:	2A - Group 2A: Probably carcinogenic to humans (N-Nitrosodimethylamine)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Benz[e]acephenanthrylene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (chrysene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Benzo[k]fluoranthene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Naphthalene)
	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. (Naphthalene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Benz[a]anthracene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (carbazole)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Hexachloroethane)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Hexachlorobenzene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Bis(2-ethylhexyl) phthalate)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (2,4-dichlorophenol)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (2,4-dinitrotoluene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (1,4-dichlorobenzene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (N-Nitroso dipropylamine)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (isophorone)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (2,6-Dinitrotoluene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Nitrobenzene)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (2,4,6,-Trichlorophenol)
IARC:	2B - Group 2B: Possibly carcinogenic to humans (Indeno[1,2,3-cd]pyrene)
NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

May harm the unborn child.
May impair fertility.

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

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.

Stomach - Irregularities - Based on Human Evidence

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)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Irritations - 4 h
(OECD Test Guideline 404)
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)
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
Limited evidence of carcinogenicity in animal studies
Suspected human carcinogens

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
No data available

Aspiration hazard
No data available

benzene

Acute toxicity
LD50 Oral - Rat - male - > 2,000 mg/kg
(OECD Test Guideline 401)
Symptoms: Nausea
LC50 Inhalation - Rat - female - 4 h - 43.7 mg/l - vapor
(OECD Test Guideline 403)
LD50 Dermal - Rabbit - male and female - > 8,260 mg/kg
(OECD Test Guideline 402)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Irritating to skin. - 4 h
(OECD Test Guideline 404)
Drying-out effect resulting in rough and chapped skin.

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Eye irritation
Remarks: (ECHA)

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: Salmonella typhimurium
Result: negative
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster lung cells
Result: positive
Test Type: In vitro mammalian cell gene mutation test
Result: positive
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

Specific target organ toxicity - repeated exposure
Causes damage to organs through prolonged or repeated exposure. - Blood

Aspiration hazard
May be fatal if swallowed and enters airways.

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 - >= 15.68 mg/l - aerosol
Remarks: (ECHA)
LD50 Dermal - Rabbit - > 21,000 mg/kg
Remarks: (RTECS)
No data available

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
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
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
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)
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)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Moderate skin irritation
Remarks: (RTECS)
(Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: No skin 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
LD0 Oral - Rat - male and female - > 20,000 mg/kg
(OECD Test Guideline 401)
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)

No data available

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)
- Mouse
Result: Does not cause respiratory sensitization.
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
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.
Inhalation: Corrosive to respiratory system.
Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract
Inhalation: No data available
LD50 Dermal - Rat - male and female - 780 mg/kg
(OECD Test Guideline 402)

Skin corrosion/irritation
Skin - Rabbit
Result: Causes burns.
Remarks: (IUCLID)
(Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Result: negative
Remarks: (National Toxicology Program)
Test Type: Mutagenicity (mammal cell test):
Result: positive
Remarks: (National Toxicology Program)

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
Acute toxicity estimate Oral - 2,501 mg/kg
(Expert judgment)
Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Diphenyl ether
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
Causes serious eye irritation.

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
Oral: No data available
Inhalation: No data available
Acute toxicity estimate Dermal - 300.1 mg/kg
(Expert judgment)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
Sensitisation test (Magnusson and Kligman):
Result: negative
Remarks: (IUCLID)

Germ cell mutagenicity
Laboratory experiments have shown mutagenic effects.
Suspected of causing genetic defects.
In vitro tests showed mutagenic effects
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
Possible human carcinogen

Reproductive toxicity
Suspected human reproductive toxicant
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
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.**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)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

Serious eye damage/eye irritation
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

N-Nitrosodimethylamine

Acute toxicity
LD50 Oral Oral - Rat - 23 mg/kg
Remarks: (Lit.)
LC50 Inhalation - Rat - 4 h - 0.24 mg/l - vapor
Remarks: (Lit.)
Dermal: No data available
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

Aspiration hazard
No data available

N-Nitroso dipropylamine

Acute toxicity
LD50 Oral - Rat - 480.0 mg/kg
Remarks: (RTECS)

Inhalation: No data available
Dermal: No data available
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

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 Inhalation - 4 h - 11.1 mg/l - vapor
(Expert judgment)
Remarks: (Regulation (EC) No 1272/2008, Annex VI)
LD50 Dermal - Rabbit - > 10,000 mg/kg
Remarks: (RTECS)

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 24 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
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: lymphocyte
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 - Bone marrow
Result: negative

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
May cause respiratory irritation.

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)
LC50 Inhalation - Rat - male and female - 4 h - > 2.87 mg/l - dust/mist
(OECD Test Guideline 403)
Symptoms: Possible damages:, Lung edema, mucosal irritations
LD50 Dermal - Rat - female - 2,000 mg/kg
(OECD Test Guideline 402)

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 burns. - 24 h
(OECD Test Guideline 405)
Remarks: 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: 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.
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Acute inhalation toxicity - Possible damages:, Lung edema, mucosal irritations

Specific target organ toxicity - repeated exposure

Aspiration hazard
No data available

2-nitrophenol

Acute toxicity
LD50 Oral - Rat - 334 mg/kg
Remarks: (RTECS)
Symptoms: mucosal irritations, Cough, Shortness of breath
Acute toxicity estimate Inhalation - 4 h - 1.6 mg/l - dust/mist
(Expert judgment)
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)
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)
Acute toxicity estimate Inhalation - 4.0 h - 0.51 mg/l - dust/mist
(Expert judgment)
Inhalation: No data available
Acute toxicity estimate Dermal - 300 mg/kg
(Expert judgment)
LD50 Subcutaneous - Rat - 25 mg/kg

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
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.**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
Inhalation: Irritating to respiratory system.
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)
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
LC50 Inhalation - Rat - 6 h - 240 mg/m3 - dust/mist
Remarks: Behavioral:General anesthetic.
Lungs, Thorax, or Respiration:Fibrosing alveolitis.
Lungs, Thorax, or Respiration:Changes in Lung Weight.
LD50 Dermal - 300 mg/kg
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation
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
Carcinogen 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
Suspected human reproductive toxicant
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.**Aspiration hazard**
No data available

4-Bromophenyl phenyl ether

Acute toxicity
Oral: No data available

Inhalation: No data available
Dermal: No data available
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
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
LD50 Oral - Rat - 349.0 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Lungs, Thorax, or Respiration:Dyspnea.
(RTECS)
Oral: (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)
LD50 Dermal - Rabbit - 760 mg/kg
Remarks: (ECHA)
No data available

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

Aspiration hazard
No data available

2,4,6,-Trichlorophenol

Acute toxicity
LD50 Oral - Rat - 820.0 mg/kg
Remarks: (RTECS)
Inhalation: No data available
Dermal: No data available
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 24 h
Remarks: (RTECS)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Severe eye irritation - 24 h
Remarks: (RTECS)

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
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

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
No data available

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
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)
Inhalation: No data available
LD50 Dermal - 5 mg/kg
Dermal: No data available
No data available

Skin corrosion/irritation
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
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 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

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
No data available

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
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-chlorophenol

Acute toxicity
LD50 Oral - Rat - male and female - 2,000 mg/kg
(OECD Test Guideline 401)
LC50 Inhalation - Rat - male and female - 4 h - >= 4.77 mg/l - vapor
(OECD Test Guideline 403)
LD50 Dermal - Rat - male and female - 1,000 - 1,580 mg/kg
Remarks: (ECHA)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Causes burns.
Remarks: (ECHA)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Causes serious eye damage.
Remarks: (ECHA)

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Result: negative
Remarks: (IUCLID)
Test Type: Mutagenicity (mammal cell test): micronucleus.
Test system: Chinese hamster lung cells
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

Benz[e]acephenanthrylene

Acute toxicity
Oral: No data available
Inhalation: No data available
Dermal: No data available
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
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.

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
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[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

Benzo[jk]fluorene

Acute toxicity
LD50 Oral - Rat - 2,000 mg/kg
Remarks: (RTECS)
Inhalation: No data available
LD50 Dermal - Rabbit - 3,180 mg/kg
Remarks: (RTECS)
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

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
Laboratory experiments have shown mutagenic effects.

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

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)
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation - 24 h
Remarks: (ECHA)
Possible damages: Dermatitis

Serious eye damage/eye irritation
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
LD50 Oral - Mouse - female - 710 mg/kg
(OECD Test Guideline 401)
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)
No data available

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.

IARC:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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[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
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
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)
Inhalation: No data available
Dermal: No data available
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: 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
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
LD50 Intraperitoneal - Mouse - > 2.0 mg/kg

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
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
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
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
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
No data available

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 charactertized 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.
LD50 Dermal - Rat - 96.0 mg/kg
Remarks: Behavioral:Excitement.
Behavioral:Muscle contraction or spasticity.
Lungs, Thorax, or Respiration:Dyspnea.
No data available

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
No data available
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
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
Oral: No data available
Inhalation: No data available
LD50 Dermal - Rat - female - 660 mg/kg
(OECD Test Guideline 402)
No data available

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)
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
No data available

Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure. - Nervous system, Kidney, Liver, Skin

Aspiration hazard
No data available

2,4-xylenol; 2,4-dimethylphenol

Acute toxicity
LD50 Oral - Rat - 3,200 mg/kg
Inhalation: No data available
LD50 Dermal - Rat - 1,040 mg/kg
No data available

Skin corrosion/irritation
Causes burns.

Serious eye damage/eye irritation
Risk of serious damage to eyes.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available
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-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)
Inhalation: No data available
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)
Dermal: No data available
LD50 Dermal - Rabbit - 90 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 - 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

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
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties
No data available

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)

benzene

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 5.3 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 10 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test IC50 - - 13 mg/l - 24 h Remarks: (ECHA)

dibutyl phthalate

Toxicity to fish	static test LC50 - Lepomis macrochirus (Bluegill sunfish) - ca. 0.48 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - ca. 2.99 mg/l - 48 h (US-EPA)
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)
Toxicity to bacteria	EC50 - Tetrahymena pyriformis - 2.2 mg/l - 24 h Remarks: (ECHA)

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	Immobilization 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)

2,4-dichlorophenol

Toxicity to fish	LC50 - Carassius auratus (goldfish) - 1.24 mg/l - 96 h Remarks: (ECOTOX Database)
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)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata - 1.13 mg/l - 72 h

(OECD Test Guideline 201)

1-Chloro-4-phenoxybenzene

Toxicity to fish	LC50 - Salvelinus fontinalis (Brook trout) - 0.73 mg/l - 96.0 h

2,4-dinitrotoluene

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 24.3 mg/l - 96 h Remarks: (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 26.2 mg/l - 48 h Remarks: (ECOTOX Database)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) - 1.6 mg/l - 96 h Remarks: (ECOTOX Database)

1,4-dichlorobenzene

Toxicity to fish	flow-through test LC50 - Salmo gairdneri - 1.12 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0.7 mg/l - 48 h Remarks: (ECHA)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 1.6 mg/l - 96 h (US-EPA)

N-Nitrosodimethylamine

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 832.00 - 1,062.00 mg/l - 96 h
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 4.00 mg/l - 96 h

N-Nitroso dipropylamine

No data available

1,2-Dichlorobenzene

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.58 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Ceriodaphnia dubia (water flea) - 0.66 mg/l - 48 h (US-EPA)

Toxicity to algae	Growth rate EC50 - Pseudokirchneriella subcapitata (green algae) - 2.2 mg/l - 96 h (US-EPA)

chlorocresol

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.917 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 2.29 mg/l - 48 h (US-EPA)
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)
Toxicity to bacteria	static test EC50 - activated sludge - 41.4 mg/l - 3 h (OECD Test Guideline 209)

2-nitrophenol

No data available

Toxicity to daphnia and other aquatic invertebrates	Remarks: No data available
Toxicity to bacteria	Remarks: 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)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0.04 mg/l - 48 h (OECD Test Guideline 202)

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)
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h (US-EPA)
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) -

	475 mg/l - 72 h Remarks: (ECHA)
Toxicity to bacteria	EC10 - Pseudomonas putida - 435 mg/l - 18 h Remarks: (External MSDS)

2,6-Dinitrotoluene

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 17.2 - 50 mg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 21.70 mg/l - 48 h
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 11.00 - 20.00 mg/l - 72 h

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
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)

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

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

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)

2-chlorophenol

Toxicity to fish	LC50 - Lepomis macrochirus (Bluegill) - 5.7 - 12 mg/l - 96.0 h Remarks: (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 3.91 mg/l - 48 h Remarks: (ECOTOX Database)
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 70.00 mg/l - 96 h Remarks: (ECOTOX Database)
Toxicity to bacteria	microtox test EC50 - Photobacterium phosphoreum - 6.8 mg/l - 1 h Remarks: (IUCLID)

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)

Benz[e]acephenanthrylene

No data available

chrysene

No data available

Benzo[k]fluoranthene
No data available

benzo[a]pyrene
No data available

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)

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)

Dibenz[a,h]anthracene

Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 0.496 mg/l - 24 h

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)

Naphthalene

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.6 mg/l - 96 h (OECD Test Guideline 203) flow-through test LC50 - Pimephales promelas (fathead minnow) - 7.9 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 Remarks: (ECHA)

Benzo[ghi]perylene

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0.0002 mg/l - 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

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)

Benz[a]anthracene

No data available

Fluorene

Toxicity to fish	LC50 - Fish - 0.82 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	Remarks: No data available
Toxicity to algae	EC50 - Algae - 3.4 mg/l - 96 h

Azobenzene

Toxicity to fish	LC50 - Oryzias latipes - 0.5 mg/l - 48.0 h
Toxicity to daphnia	EC50 - Daphnia magna (Water flea) - 5.00 mg/l - 24 h

and other aquatic invertebrates	
	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)

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 - No information available. - 0.36 mg/l - 10 d 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

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	static test EC50 - Ceriodaphnia dubia (water flea) - 3.1 mg/l -

and other aquatic invertebrates	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)

2,4-xylenol; 2,4-dimethylphenol

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 9.2 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 2.1 mg/l - 48 h

bis(2-chloroethyl) ether

Toxicity to fish	semi-static test LC50 - Oryzias latipes - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 240 mg/l - 48 h (US-EPA)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 79.44 mg/l - 72 h (OECD Test Guideline 201)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)

UN number: 1992 Class: 3 (6.1) Packing group: II
Proper shipping name: Flammable liquids, toxic, n.o.s. (Dichloromethane, benzene)
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 1 lbs
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 1000 lbs

Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 1 lbs
Reportable Quantity (RQ): 31 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 1992 Class: 3 (6.1) Packing group: II EMS-No: F-E, S-D
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (Dichloromethane, benzene)
Marine pollutant : yes

IATA
UN number: 1992 Class: 3 (6.1) Packing group: II
Proper shipping name: Flammable liquid, toxic, n.o.s. (Dichloromethane, benzene)

SECTION 15: Regulatory information

US TSCA Section 3
This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

SARA 302 Components
This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Dichloromethane	75-09-2	2007-07-01
benzene	71-43-2	2007-07-01
2-chlorophenol	95-57-8	1993-02-16
Benz[e]acephenanthrylene	205-99-2	2007-03-01
Benzo[k]fluoranthene	207-08-9	1993-02-16
benzo[a]pyrene	50-32-8	2007-03-01
Dibenz[a,h]anthracene	53-70-3	1993-02-16
Benz[a]anthracene	56-55-3	1993-02-16
	193-39-5	1993-02-16

Indeno[1,2,3-cd]pyrene		
Pentachlorophenol	87-86-5	2020-07-14
Hexachloroethane	67-72-1	2007-07-01
Hexachlorobenzene	118-74-1	2015-11-23
Bis(2-ethylhexyl) phthalate	117-81-7	2020-07-14
2,4-dinitrotoluene	121-14-2	2007-07-01
1,4-dichlorobenzene	106-46-7	2020-07-14
N-Nitrosodimethylamine	62-75-9	2008-11-03
N-Nitroso dipropylamine	621-64-7	2007-07-01
2,6-Dinitrotoluene	606-20-2	2007-07-01
Nitrobenzene	98-95-3	2008-11-03
2,4,6,-Trichlorophenol	88-06-2	2007-07-01

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Reportable Quantity :	D018 lbs
	D037 lbs
	F027 lbs
	D034 lbs
	D032 lbs
	D030 lbs
	D027 lbs
	F002 lbs

D036 lbs

F004 lbs

D042 lbs

D033 lbs

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Other regulations
This material is or contains a chemical identified as a Persistent Bioaccumulative and Toxic Chemical under 40 C.F.R. §751 Subpart E. MilliporeSigma is supplying this chemical in compliance with 40 C.F.R. § 751.401. It may only be used for research and development as defined in 40 C.F.R. § 751.403, specifically, it may only be used "for purposes of scientific experimentation or analysis, or chemical research on, or analysis of, the chemical substance, including methods for disposal, but not for research or analysis for the development of a new product, or refinement of an existing product that contains the chemical substance.

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

SECTION 16: Other information

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. 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.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 6.12 Revision Date: 07/28/2022 Print Date: 11/16/2022