

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : 8270 Phenols Standard
Product code : AL0-101234
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Laboratory use
Industrial/Professional use spec : Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenova
6390 Joyce Dr. Suite 100
80403 Golden, CO - United States
T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924
ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Acute Tox. 4 (Inhalation) H332
Carc. 2 H351
Aquatic Acute 1 H400
Aquatic Chronic 2 H411

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc. Cat. 3; R40
E; R2
Xn; R20/21/22
N; R50/53
R44

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Warning

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous ingredients	: 2,4-dichlorophenol; 4,6-Dinitro-2-methylphenol; 2,4-dinitrophenol; 2,3,4,5,6-pentachlorophenol; phenol; 2,3,4,6-tetrachlorophenol; 2,3,5,6-tetrachlorophenol; 2,4-Dimethylphenol; 2-Methylphenol; 3-Methylphenol; 4-Methylphenol; dinoseb; Methylene Chloride
Hazard statements (CLP)	: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled H351 - Suspected of causing cancer H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P308+P313 - IF exposed or concerned: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P391 - Collect spillage P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
EUH-statements	: EUH208 - Contains 4-chloro-3-methylphenol(59-50-7), 4,6-dinitro-o-cresol(534-52-1). May produce an allergic reaction EUH044 - Risk of explosion if heated under confinement

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methylene Chloride (Component)	(CAS-No.) 75-09-2 (EC-No.) 200-838-9 (EC Index-No.) 602-004-00-3	96.2	Carc. 2, H351
4-chloro-3-methylphenol (Component)	(CAS-No.) 59-50-7 (EC-No.) 200-431-6 (EC Index-No.) 604-014-00-3	0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400
2,4-dichlorophenol (Component)	(CAS-No.) 120-83-2 (EC-No.) 204-429-6 (EC Index-No.) 604-011-00-7	0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
2,6-dichlorophenol (Component)	(CAS-No.) 87-65-0 (EC-No.) 201-761-3	0.2	Skin Corr. 1B, H314 Aquatic Chronic 2, H411
4,6-Dinitro-2-methylphenol (Component)	(CAS-No.) 534-52-1 (EC-No.) 208-601-1 (EC Index-No.) 609-020-00-X	0.2	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,4-dinitrophenol (Component)	(CAS-No.) 51-28-5 (EC-No.) 200-087-7 (EC Index-No.) 609-041-00-4	0.2	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Acute 1, H400
2,3,4,5,6-pentachlorophenol (Component)	(CAS-No.) 87-86-5 (EC-No.) 201-778-6 (EC Index-No.) 604-002-00-8	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
phenol (Component)	(CAS-No.) 108-95-2 (EC-No.) 203-632-7 (EC Index-No.) 604-001-00-2	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373
2,3,4,6-tetrachlorophenol (Component)	(CAS-No.) 58-90-2 (EC-No.) 200-402-8 (EC Index-No.) 604-013-00-8	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
2,3,5,6-tetrachlorophenol (Component)	(CAS-No.) 935-95-5 (EC-No.) 213-310-8	0.2	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319
2,4,5-trichlorophenol (Component)	(CAS-No.) 95-95-4 (EC-No.) 202-467-8 (EC Index-No.) 604-017-00-X	0.2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,6-trichlorophenol (Component)	(CAS-No.) 88-06-2 (EC-No.) 201-795-9 (EC Index-No.) 604-018-00-5	0.2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-chlorophenol (Component)	(CAS-No.) 95-57-8 (EC-No.) 202-433-2 (EC Index-No.) 604-008-00-0	0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
2,4-Dimethylphenol (Component)	(CAS-No.) 105-67-9 (EC-No.) 203-321-6 (EC Index-No.) 604-006-00-X	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
2-Methylphenol (Component)	(CAS-No.) 95-48-7 (EC-No.) 202-423-8 (EC Index-No.) 604-004-00-9	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314
3-Methylphenol (Component)	(CAS-No.) 108-39-4 (EC-No.) 203-577-9 (EC Index-No.) 604-004-00-9	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
4-Methylphenol (Component)	(CAS-No.) 106-44-5 (EC-No.) 203-398-6 (EC Index-No.) 604-004-00-9	0.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314
dinoseb (Component) (substance listed as REACH Candidate (Dinoseb (6-sec-butyl-2,4-dinitrophenol)))	(CAS-No.) 88-85-7 (EC-No.) 201-861-7 (EC Index-No.) 609-025-00-7	0.2	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Eye Irrit. 2, H319 Repr. 1B, H360D Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	Specific concentration limits	
phenol (Component)	(CAS-No.) 108-95-2 (EC-No.) 203-632-7 (EC Index-No.) 604-001-00-2	(1 =<C < 3) Eye Irrit. 2, H319 (1 =<C < 3) Skin Irrit. 2, H315 (C >= 3) Skin Corr. 1B, H314	
2,3,4,6-tetrachlorophenol (Component)	(CAS-No.) 58-90-2 (EC-No.) 200-402-8 (EC Index-No.) 604-013-00-8	(C >= 5) Skin Irrit. 2, H315 (C >= 5) Eye Irrit. 2, H319	
2,4,5-trichlorophenol (Component)	(CAS-No.) 95-95-4 (EC-No.) 202-467-8 (EC Index-No.) 604-017-00-X	(C >= 5) Skin Irrit. 2, H315 (C >= 5) Eye Irrit. 2, H319	

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
- Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Risk of explosion if heated under confinement.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Hazardous waste due to potential risk of explosion.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from sources of ignition - No smoking. No open flames. No smoking.
- Hygiene measures : Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep container closed when not in use. Keep in fireproof place. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2. Exposure controls

- Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.
Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



- Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
Eye protection : Chemical goggles or safety glasses. Safety glasses.
Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection : Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
Colour : Colourless.
Odour : characteristic.
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Non flammable
Relative density : No data available
Solubility : No data available
Explosive properties : Risk of explosion if heated under confinement.
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Risk of explosion if heated under confinement. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

8270 Phenols Standard	
ATE CLP (oral)	1787.4042933952 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8270 Phenols Standard	
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h
4-chloro-3-methylphenol (59-50-7)	
LD50 oral rat	1194 mg/kg (Rat)
LC50 inhalation rat (mg/l)	> 0.7 mg/l/4h (Rat)
ATE CLP (oral)	1194 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
2,4-dichlorophenol (120-83-2)	
LD50 dermal rat	780 mg/kg bodyweight (Rat; Weight of evidence; OECD 402: Acute Dermal Toxicity)
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	780 mg/kg bodyweight
2,6-dichlorophenol (87-65-0)	
LD50 oral rat	2940 mg/kg (Rat; Weight of evidence)
ATE CLP (oral)	2940 mg/kg bodyweight
4,6-Dinitro-2-methylphenol (534-52-1)	
LD50 oral rat	7 - 40 mg/kg (Rat)
LD50 dermal rat	200 mg/kg (Rat)
ATE CLP (oral)	7 mg/kg bodyweight
ATE CLP (dermal)	5 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0.5 mg/l/4h
ATE CLP (dust,mist)	0.05 mg/l/4h
2,4-dinitrophenol (51-28-5)	
LD50 oral rat	30 mg/kg (Rat)
ATE CLP (oral)	30 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0.5 mg/l/4h
2,3,4,5,6-pentachlorophenol (87-86-5)	
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0.5 mg/l/4h
ATE CLP (dust,mist)	0.05 mg/l/4h
phenol (108-95-2)	
LD50 oral rat	650 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rat	660 mg/kg (Rat; Experimental value; Equivalent or similar to OECD 402)
LD50 dermal rabbit	850 - 1400 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.32 mg/l/4h (Rat; Literature study)
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	660 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	0.32 mg/l/4h
ATE CLP (dust,mist)	0.32 mg/l/4h
2,3,4,6-tetrachlorophenol (58-90-2)	
LD50 oral rat	140 mg/kg (Rat)
LD50 dermal rat	485 mg/kg (Rat)
ATE CLP (oral)	140 mg/kg bodyweight
ATE CLP (dermal)	485 mg/kg bodyweight
2,3,5,6-tetrachlorophenol (935-95-5)	
LD50 oral rat	109 mg/kg (Rat)
ATE CLP (oral)	109 mg/kg bodyweight
2,4,5-trichlorophenol (95-95-4)	
LD50 oral rat	820 mg/kg (Rat)
ATE CLP (oral)	820 mg/kg bodyweight

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2,4,6-trichlorophenol (88-06-2)	
LD50 oral rat	820 mg/kg (Rat; Literature study)
ATE CLP (oral)	820 mg/kg bodyweight
2-chlorophenol (95-57-8)	
LD50 oral rat	670 mg/kg bodyweight (Rat; Literature study)
ATE CLP (oral)	670 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h
2,4-Dimethylphenol (105-67-9)	
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
2-Methylphenol (95-48-7)	
LD50 oral rat	121 mg/kg (Rat)
LD50 dermal rat	620 mg/kg (Rat)
LD50 dermal rabbit	890 mg/kg (Rabbit)
ATE CLP (oral)	121 mg/kg bodyweight
ATE CLP (dermal)	620 mg/kg bodyweight
3-Methylphenol (108-39-4)	
LD50 oral rat	242 mg/kg (Rat)
LD50 dermal rat	1100 mg/kg (Rat)
LD50 dermal rabbit	2050 mg/kg (Rabbit)
ATE CLP (oral)	242 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
4-Methylphenol (106-44-5)	
LD50 oral rat	207 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	301 mg/kg (Rabbit)
ATE CLP (oral)	207 mg/kg bodyweight
ATE CLP (dermal)	301 mg/kg bodyweight
dinoseb (88-85-7)	
LD50 oral rat	25 - 40 mg/kg (Rat)
LD50 dermal rat	80 - 134 mg/kg (Rat)
LD50 dermal rabbit	80 mg/kg (Rabbit)
ATE CLP (oral)	25 mg/kg bodyweight
ATE CLP (dermal)	80 mg/kg bodyweight
Methylene Chloride (75-09-2)	
LD50 oral rat	> 2000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Suspected of causing cancer. May cause cancer
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Potential adverse human health effects and symptoms : Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

4-chloro-3-methylphenol (59-50-7)	
LC50 fish 2	0.917 mg/l (LC50; 96 h)
EC50 Daphnia 2	2 mg/l (EC50; 48 h)
Threshold limit algae 1	4.2 mg/l (EC50; 72 h)
2,4-dichlorophenol (120-83-2)	
EC50 Daphnia 2	1.3 - 5.1 mg/l (EC50; 48 h; Daphnia magna)
2,6-dichlorophenol (87-65-0)	
LC50 fish 1	6.4 mg/l (LC50; 96 h; Oryzias latipes)
EC50 Daphnia 1	3.4 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 2	9.7 mg/l (EC50; 96 h; Chlorella vulgaris)
4,6-Dinitro-2-methylphenol (534-52-1)	
LC50 fish 1	0.066 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.145 mg/l (EC50; 48 h)
2,4-dinitrophenol (51-28-5)	
LC50 fish 1	0.62 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 Daphnia 1	4.39 mg/l (EC50; 48 h)
2,3,4,5,6-pentachlorophenol (87-86-5)	
LC50 fish 1	0.052 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.01 - 0.36 mg/l (EC50; 48 h)
phenol (108-95-2)	
LC50 other aquatic organisms 1	0.04 mg/l (4 days; Rana sp.; LC50)
EC50 Daphnia 2	6.6 mg/l (EC50; 48 h; Daphnia magna; Static system)
2,3,4,6-tetrachlorophenol (58-90-2)	
LC50 fish 1	0.14 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 Daphnia 1	0.01 mg/l (EC50; 48 h)
Threshold limit algae 2	1.3 mg/l (EC50; 96 h)
2,3,5,6-tetrachlorophenol (935-95-5)	
EC50 other aquatic organisms 1	1.01 mg/l (48 h; Protozoa; Growth)
2,4,5-trichlorophenol (95-95-4)	
LC50 fish 1	0.45 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 Daphnia 1	0.9 - 2.7 mg/l (EC50; 48 h)
2,4,6-trichlorophenol (88-06-2)	
LC50 fish 1	0.73 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 2	0.69 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 2	3.5 mg/l (EC50; 96 h; Selenastrum capricornutum)
2-chlorophenol (95-57-8)	
LC50 fish 1	2.6 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	7.4 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 2	70 mg/l (EC50; 72 h; Algae)
2,4-Dimethylphenol (105-67-9)	
LC50 fish 1	7.8 mg/l (LC50; 96 h)
EC50 Daphnia 1	2.1 mg/l (EC50; 48 h)
Threshold limit algae 2	32 mg/l (EC50; 72 h)
2-Methylphenol (95-48-7)	
EC50 other aquatic organisms 1	65 mg/l (96 h; Selenastrum capricornutum)
LC50 fish 2	7.9 - 8.4 mg/l (LC50; 96 h)
EC50 Daphnia 2	5 - 9.5 mg/l (EC50; 48 h)
3-Methylphenol (108-39-4)	
LC50 fish 1	8.9 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	8.9 mg/l (EC50; 24 h)
Threshold limit algae 1	15 mg/l (EC0; 192 h)

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

4-Methylphenol (106-44-5)	
LC50 fish 2	7.5 mg/l (LC50; 96 h)
EC50 Daphnia 2	1.4 - 21.1 mg/l (EC50; 48 h)
Threshold limit algae 2	21 mg/l (EC50; 48 h)
dinoseb (88-85-7)	
LC50 fish 1	0.08 - 0.15 mg/l (LC50; 96 h)
EC50 Daphnia 1	0.68 mg/l (LC50)
Methylene Chloride (75-09-2)	
LC50 fish 1	193 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	168.2 mg/l (EC50; 48 h)

12.2. Persistence and degradability

8270 Phenols Standard	
Persistence and degradability	May cause long-term adverse effects in the environment.
4-chloro-3-methylphenol (59-50-7)	
Persistence and degradability	Biodegradable in water.
Chemical oxygen demand (COD)	1.5 - 1.8 g O ₂ /g substance
2,4-dichlorophenol (120-83-2)	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil. No (test)data on mobility of the substance available.
2,6-dichlorophenol (87-65-0)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Adsorbs into the soil.
BOD (% of ThOD)	0.148 (3 h)
4,6-Dinitro-2-methylphenol (534-52-1)	
Persistence and degradability	Not readily biodegradable in water.
2,4-dinitrophenol (51-28-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available.
2,3,4,5,6-pentachlorophenol (87-86-5)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
phenol (108-95-2)	
Persistence and degradability	Readily biodegradable in water. Photolysis in water. Readily biodegradable in the soil. Inhibits biodegradation processes in the soil. Low potential for adsorption in soil. Photooxidation in the air.
Biochemical oxygen demand (BOD)	1.68 g O ₂ /g substance
Chemical oxygen demand (COD)	2.28 g O ₂ /g substance
ThOD	2.38 g O ₂ /g substance
BOD (% of ThOD)	0.71
2,3,4,6-tetrachlorophenol (58-90-2)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
2,3,5,6-tetrachlorophenol (935-95-5)	
Persistence and degradability	Not readily biodegradable in water. Biodegradability in soil: no data available.
2,4,5-trichlorophenol (95-95-4)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
2,4,6-trichlorophenol (88-06-2)	
Persistence and degradability	Readily biodegradable in water. Readily biodegradable in the soil. No (test)data on mobility of the substance available.
2-chlorophenol (95-57-8)	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil.
2-Methylphenol (95-48-7)	
Persistence and degradability	Readily biodegradable in water. Photodegradation in the air.
Biochemical oxygen demand (BOD)	1.69 - 1.74 g O ₂ /g substance
Chemical oxygen demand (COD)	2.38 g O ₂ /g substance
ThOD	2.52 g O ₂ /g substance
BOD (% of ThOD)	0.65
3-Methylphenol (108-39-4)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

3-Methylphenol (108-39-4)	
Biochemical oxygen demand (BOD)	1.7 g O ₂ /g substance
Chemical oxygen demand (COD)	2.4 g O ₂ /g substance
ThOD	2.52 g O ₂ /g substance
BOD (% of ThOD)	0.68
4-Methylphenol (106-44-5)	
Persistence and degradability	Readily biodegradable in water. Photolysis in the air.
Biochemical oxygen demand (BOD)	1.45 g O ₂ /g substance
Chemical oxygen demand (COD)	2.4 g O ₂ /g substance
ThOD	2.52 g O ₂ /g substance
BOD (% of ThOD)	0.57
dinoseb (88-85-7)	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.
Methylene Chloride (75-09-2)	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.
12.3. Bioaccumulative potential	
8270 Phenols Standard	
Bioaccumulative potential	Not established.
4-chloro-3-methylphenol (59-50-7)	
BCF fish 1	5.5 - 13 (BCF)
Log Pow	2.78 - 3.10
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,4-dichlorophenol (120-83-2)	
BCF fish 1	7.1 - 69 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 8 weeks; Cyprinus carpio; Fresh water)
Log Pow	3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,6-dichlorophenol (87-65-0)	
BCF fish 1	4.1 - 20 (BCF; 8 weeks; Cyprinus carpio)
Log Pow	2.57 - 3.33 (Literature)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
4,6-Dinitro-2-methylphenol (534-52-1)	
BCF fish 1	0.3 - 2.9 (BCF)
Log Pow	2.12 - 3.1
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,4-dinitrophenol (51-28-5)	
BCF fish 1	< 3.7 (BCF)
Log Pow	1.05 - 1.59
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,3,4,5,6-pentachlorophenol (87-86-5)	
BCF fish 1	770 (BCF; 768 h)
BCF fish 2	39 - 224 (BCF)
BCF other aquatic organisms 1	1250 (BCF)
Log Pow	4.07 - 5.19
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
phenol (108-95-2)	
Log Pow	1.47 (Experimental value; Equivalent or similar to OECD 117; 30 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,3,4,6-tetrachlorophenol (58-90-2)	
BCF fish 1	200 (BCF; 24 h)
BCF fish 2	93 (BCF; 24 h)
Log Pow	4.1 - 4.8
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).
2,3,5,6-tetrachlorophenol (935-95-5)	
Log Pow	3.88 - 4.92
Bioaccumulative potential	No bioaccumulation data available.

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2,4,5-trichlorophenol (95-95-4)	
BCF fish 1	62 (BCF)
BCF fish 2	121 - 825 (BCF)
Log Pow	3.06 - 4.19
Bioaccumulative potential	Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$).
2,4,6-trichlorophenol (88-06-2)	
BCF fish 2	12130 (BCF; 36 days; <i>Poecilia reticulata</i>)
Log Pow	3.4 - 4.05 (Literature)
Bioaccumulative potential	High potential for bioaccumulation ($\text{BCF} > 5000$).
2-chlorophenol (95-57-8)	
BCF fish 2	14 - 29 (BCF; 6 weeks; <i>Cyprinus carpio</i>)
Log Pow	2.15 (Literature)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{BCF} < 500$).
2,4-Dimethylphenol (105-67-9)	
BCF fish 1	150 (BCF; 672 h; <i>Lepomis macrochirus</i>)
Log Pow	2.2 - 2.5
Bioaccumulative potential	Low potential for bioaccumulation ($\text{BCF} < 500$).
2-Methylphenol (95-48-7)	
Log Pow	1.5 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).
3-Methylphenol (108-39-4)	
BCF fish 1	20 (BCF; 72 h)
BCF fish 2	10.7 (BCF)
BCF other aquatic organisms 1	4900 (BCF; 24 h)
Log Pow	1.96 - 2.01 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{BCF} < 500$).
4-Methylphenol (106-44-5)	
BCF fish 1	4 (BCF)
Log Pow	1.97 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).
dinoseb (88-85-7)	
BCF fish 1	< 2.5 (BCF)
BCF fish 2	1 (BCF)
Log Pow	3.09 - 4.12
Bioaccumulative potential	Potential for bioaccumulation ($4 \geq \text{Log Kow} \leq 5$).
Methylene Chloride (75-09-2)	
BCF fish 1	2 - 40 (BCF)
Log Pow	1.25 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{BCF} < 500$).

12.4. Mobility in soil

2,4-dinitrophenol (51-28-5)	
Ecology - soil	Toxic to flora.
phenol (108-95-2)	
Surface tension	0.0713 N/m (20 °C)
2-chlorophenol (95-57-8)	
Surface tension	0.042 N/m (13 °C)
2-Methylphenol (95-48-7)	
Surface tension	0.04 N/m (20 °C)
3-Methylphenol (108-39-4)	
Surface tension	0.04 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
4-Methylphenol (106-44-5)	
Surface tension	0.041 N/m (40 °C)
dinoseb (88-85-7)	
Ecology - soil	Toxic to bees.

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Methylene Chloride (75-09-2)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Results of PBT and vPvB assessment

Component	
dinoseb (88-85-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Hazardous waste due to potential risk of explosion.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3082
UN-No. (IATA) : 3082
UN-No. (IMDG) : 3082
UN-No. (ADN) : 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dichloromethane(75-09-2)), 9, III, (E)

14.3. Packing group

Class (ADR) : 9
Classification code (ADR) : M6
Class (IATA) : 9
Class (IMDG) : 9
Class (ADN) : 9
Classification code (ADN) : M6
Danger labels (ADR) : 9



Hazard labels (IATA) : 9



Danger labels (IMDG) : 9



8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Danger labels (ADN) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IATA) : III
Packing group (IMDG) : III
Packing group (ADN) : III

14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6
Orange plates :



Special provisions (ADR) : 274, 335, 601, 375
Transport category (ADR) : 3
Tunnel restriction code (ADR) : E
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

14.6.2. Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

14.6.3. Air transport

CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
PCA packing instructions (IATA) : 964
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA max net quantity (IATA) : 450L
PCA Excepted quantities (IATA) : E1
Special provisions (IATA) : A97, A158, A197
ERG code (IATA) : 9L

14.6.4. Inland waterway transport

Special provisions (ADN) : 274, 335, 375, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1

8270 Phenols Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0
Carriage prohibited (ADN)	: No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Dinoseb (6-sec-butyl-2,4-dinitrophenol) (EC 201-861-7, CAS 88-85-7)

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

PHV SDS EU

Copyright 2015 Phenova, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Phenova, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at www.phenova.com for additional terms and conditions of sale.