

SAFETY DATA SHEET

Version: 27
Date of Issue: 21.08.2017
Date of First Issue: 18.12.2012



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
Product Name Wolf Trax Manganese DDP
CAS No. Mixture
EINECS No. Mixture
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified Use(s) Fertiliser
Uses Advised Against Anything other than the above.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification Compass Minerals USA Inc.
9900 W. 109th St.
Overland Park, KS 66210 USA
Telephone +1 1800 551 8216
Website www.compassminerals.com
E-mail techservicesrequests@compassminerals.com
- 1.4 Emergency telephone number**
Languages spoken 613-996-6666 (Canada)
English / French

2. SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
2.1.1 Regulation (EC) No. 1272/2008 (CLP)
Acute Tox. 4; H302
Eye Dam. 1; H318
STOT RE 2; H373
Aquatic Chronic 2; H411
- 2.2 Label elements**
Product Name According to Regulation (EC) No. 1272/2008 (CLP)
Wolf Trax Manganese DDP
- Contains: Manganese sulphate, Manganese Chloride
- Hazard Pictogram(s)
- 
- Signal Word(s) Danger
- Hazard Statement(s)
H302: Harmful if swallowed.
H318: Causes serious eye damage.
H373: May cause damage to organs through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.
- Precautionary Statement(s)
P260: Do not breathe dust.
P264: Wash hands and exposed skin thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312: IF SWALLOWED: 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.

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P310: Immediately call a POISON CENTER/doctor.

2.3 Other hazards

None known

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable

3.2 Mixtures Substances in preparations / mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Manganese sulphate	<70	7785-87-7	232-089-9	01-2119456624-35-0013	Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Chronic 2; H411
Manganese Chloride	<70	7773-01-5	231-869-6	01-2119934899-15-0000	Acute Tox. 4; H302 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Chronic 2; H411
Sulfonated aromatic polymer, sodium salt	<5	None assigned	None assigned	Proprietary – registered by manufacturer	Skin Irrit. 2; H315 Eye Irrit. 2; H319
Alkyl naphthalenesulfonate, sodium salt	<5	None assigned	None assigned	Proprietary – registered by manufacturer	Skin Irrit. 2; H315 Eye Irrit. 2; H319

For full text of H phrases see section 16.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing dust. Do not ingest. If swallowed then seek immediate medical assistance. Avoid contact with skin and eyes. Contaminated clothing should be laundered before reuse.

Inhalation

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Wash with plenty of water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. If vomiting occurs turn patient on side. Do not give milk or alcoholic beverages. Rinse mouth with water but do not swallow. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

Notes to a physician:

IF IN EYES: Obtain prompt consultation, preferably from an ophthalmologist.

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5. SECTION 5: FIRE-FIGHTING MEASURES

- | | |
|--|--|
| 5.1 Extinguishing media
Suitable Extinguishing Media
Unsuitable extinguishing Media | As appropriate for surrounding fire.
Direct water jet may spread the fire. |
| 5.2 Special hazards arising from the substance or mixture | Not flammable. Thermal decomposition will evolve irritant and flammable vapours. Hazardous decomposition product(s): Chlorine, Hydrogen chloride. |
| 5.3 Advice for fire-fighters | Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers. |

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

- | | |
|--|--|
| 6.1 Personal precautions, protective equipment and emergency procedures | Caution - spillages may be slippery. Ensure operatives are trained to minimise exposures. Ensure suitable personal protection during removal of spillages. Eliminate sources of ignition. Shut off leaks if without risk. Avoid contact with skin and eyes. Ensure adequate ventilation. Do not breathe dust. Avoid dust generation. Do not ingest. If swallowed then seek immediate medical assistance. |
| 6.2 Environmental precautions | Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body. |
| 6.3 Methods and material for containment and cleaning up | Sweep spilled substances into containers if appropriate moisten first to prevent dusting. Recommended: Vacuum spilled material. Avoid dust generation. Collect mechanically and dispose of according to Section 13. Ventilate the area and wash spill site after material pick-up is complete. |
| 6.4 Reference to other sections | See Section: 8, 13 |

7. SECTION 7: HANDLING AND STORAGE

- | | |
|--|---|
| 7.1 Precautions for safe handling | Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Wear protective gloves/eye protection. Avoid dust generation. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. |
| 7.2 Conditions for safe storage, including any incompatibilities
Storage temperature
Storage life

Incompatible materials | Store in a cool/low-temperature, well-ventilated (dry) place. Keep container closed when not in use. Keep away from sources of ignition.
Ambient
Keep only in original container. Do not store near acids. Keep away from water. Keep away from heat and direct sunlight.
Strong oxidising agents. Avoid contact with acids and alkalis. Sodium Oxide. Sodium. |
| 7.3 Specific end use(s) | See Section: 1.2 |

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8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m³ (8hr TWA) total inhalable dust; 5 mg/m³ (8hr TWA) total respirable dust.

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Silicon dioxide (silica, amorphous)	7631-86-9	-	6	-	-	WEL
		-	2.4	-	-	Inhalable Dust
						Respirable Dust

WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)

An approved dust mask should be worn. Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke at the work place.

Eye/face protection



Use eye protection according to EN 166, designed to protect against dusts.

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Protective index 6, corresponding > 480 minutes of permeation time according to EN 374
Recommended: Nitrile rubber (Minimum thickness: 0.35mm)

Body protection: Wear suitable coveralls to prevent exposure to the skin.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN140 with Type A/P2 filter or better.

Thermal hazards

None anticipated.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties (Substances in preparations / mixtures)

Appearance

Pink Powder

Odour

Odourless

Odour Threshold

Not determined.

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pH	6.5 - 8.0 (5% Aqueous solution)
Melting Point/Freezing Point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash Point	Not applicable.
Evaporation Rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Not applicable.
Solubility(ies)	Not determined.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information None known.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Avoid dust generation. May be corrosive to metals.
10.4 Conditions to avoid	Keep away from: Water, Heat. Protect from moisture. Thermal decomposition will evolve irritant and flammable vapours.
10.5 Incompatible materials	Strong oxidising agents. Avoid contact with acids and alkalis. Sodium Oxide. Sodium.
10.6 Hazardous decomposition product(s)	Hazardous decomposition product(s): Hydrogen chloride, Sulphur oxides, Magnesium oxide (as Mg)

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)	
Acute toxicity - Ingestion	Acute Tox. 4; Harmful if swallowed. Acute Toxicity Estimate Mixture Calculation: LD50 1312.3 mg/kg bw/day
Manganese sulphate	Not classified LD50 (oral, rat) mg/kg: >2150 (Singh PP et al, 1991)
Manganese Chloride	Acute Tox. 4; H302 LD50 (oral, rat) mg/kg: 1330 (Singh PP et al, 1991)
Sulfonated aromatic polymer, sodium salt	Not classified. No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. No data
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LC50 > 5.0 mg/l
Manganese sulphate	Not classified LC50 (inhalation, rat) mg/l/4h: >4.45 (OECD 403)
Manganese Chloride	Not classified. No data
Sulfonated aromatic polymer, sodium salt	Not classified. No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. No data
Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw/day
Manganese sulphate	Not classified.

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Manganese Chloride	No data Not classified.
Sulfonated aromatic polymer, sodium salt	No data Not classified.
Alkyl naphthalenesulfonate, sodium salt	No data Not classified.
Skin corrosion/irritation	No data
Manganese sulphate	Based upon the available data, the classification criteria are not met. Not classified.
Manganese Chloride	Not irritating to skin (rabbit) (OECD 404) Not classified.
Sulfonated aromatic polymer, sodium salt	Not irritating to skin (rabbit) (OECD 404) Skin Irrit. 2; H315
Alkyl naphthalenesulfonate, sodium salt	No data Skin Irrit. 2; H315
Serious eye damage/irritation	No data
Manganese sulphate	Eye Dam. 1; Causes serious eye damage. Eye Dam. 1; H318
Manganese Chloride	Causes severe eye damage. (rabbit) (OECD 405) Eye Dam. 1; H318
Sulfonated aromatic polymer, sodium salt	Irritating to eyes. (rabbit) (OECD 405) Eye Irrit. 2; H319
Alkyl naphthalenesulfonate, sodium salt	No data Eye Irrit. 2; H319
Respiratory or skin sensitization	No data
Manganese sulphate	Based upon the available data, the classification criteria are not met. Not classified. Skin sensitization: Manganese sulphate reduced the sensitisation effect of nickel sulphate and did not cause sensitisation even when present at 75-80% w/v solution. This supports non-classification of MnSO ₄ as a skin sensitiser. (Santucci B et al, 1996)
Manganese Chloride	Not classified. Skin sensitization: All data read across from: Manganese sulphate. Manganese sulphate reduced the sensitisation effect of nickel sulphate and did not cause sensitisation even when present at 75-80% w/v solution. This supports non-classification of MnSO ₄ as a skin sensitiser. (Santucci B et al, 1996)
Sulfonated aromatic polymer, sodium salt	Not classified.
Alkyl naphthalenesulfonate, sodium salt	No data Not classified.
Germ cell mutagenicity	No data
Manganese sulphate	Based upon the available data, the classification criteria are not met. Not classified In vitro: Negative (OECD 471) In vivo: Negative (OECD 474)
Manganese Chloride	Not classified In vitro: Negative (OECD 471) In vivo: Negative (OECD 474)
Sulfonated aromatic polymer, sodium salt	Not classified. In vitro: No data In vivo: No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. In vitro: No data In vivo: No data
Carcinogenicity	Based upon the available data, the classification criteria are not met.
Manganese sulphate	Not classified. No evidence of carcinogenic effects. (rat) (Unnamed, 1993)
Manganese Chloride	Not classified. No evidence of carcinogenic effects. (mouse) (Di Paolo, 1964)

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Sulfonated aromatic polymer, sodium salt	Not classified. No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. No data
Reproductive toxicity Manganese sulphate	Based upon the available data, the classification criteria are not met. Not classified. Reproductive toxicity: There were no changes in fertility but an increase was seen in the number of resorptions (Bataineh H., et al, 1998) Developmental toxicity: No observed fetotoxicity, viability or teratogenicity (Järvinen R & Ahlström A, 1975)
Manganese Chloride	Not classified. Reproductive toxicity: Body weight development indicates no significant toxicity in females (Elbetieha, 2001) Developmental toxicity: No data
Sulfonated aromatic polymer, sodium salt	Not classified. Reproductive toxicity: No data Developmental toxicity: No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. Reproductive toxicity: No data Developmental toxicity: No data
STOT - single exposure Manganese sulphate	Based upon the available data, the classification criteria are not met. Not classified. Weight of evidence approach: Based upon the available data, the classification criteria are not met.
Manganese Chloride	Not classified. Weight of evidence approach: Based upon the available data, the classification criteria are not met.
Sulfonated aromatic polymer, sodium salt	Not classified. No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. No data
STOT - repeated exposure Manganese sulphate	STOT RE 2; May cause damage to organs through prolonged or repeated exposure. STOT RE 2; H373 Harmonised Classification Oral: NOAEL 1700 mg/kg bw/day (Unnamed, 1973) Inhalation: No data. Dermal: No data.
Manganese Chloride	STOT RE 2; H373 Oral: NOAEL 16 mg/kg bw/day (Singh, 1979) Inhalation: LOAEC 3.9 mg/m ³ Air 6hr/Day. (Lipe, 1999) Dermal: No data.
Sulfonated aromatic polymer, sodium salt	Not classified. Oral: No data Inhalation: No data Dermal: No data
Alkyl naphthalenesulfonate, sodium salt	Not classified. Oral: No data Inhalation: No data Dermal: No data
Aspiration hazard	Based upon the available data, the classification criteria are not met.
11.2 Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Estimated LC50 (Fish) ≤ 1 mg/l (96 hour)
Manganese sulphate	Aquatic Chronic 2; H411 Harmonised Classification

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	Manganese Chloride	Acute toxicity: LC50 (Fish) mg/l 49.9 (96 hour) (Davies P and Brinkman S, 1994) Chronic Toxicity: Weight of evidence approach NOEC 0.6 mg/l (Davies P and Brinkman S, 1994) Aquatic Chronic 2; H411 Acute toxicity: All data read across from: Manganese sulphate. LC50 (Fish) mg/l 49.9 (96 hour) (Davies P and Brinkman S, 1994) Chronic Toxicity: All data read across from: Manganese sulphate. NOEC 0.6 mg/l (Davies P and Brinkman S, 1994) Not classified.
	Sulfonated aromatic polymer, sodium salt	Acute toxicity: No data Chronic Toxicity: No data Not classified.
	Alkyl naphthalenesulfonate, sodium salt	Acute toxicity: No data Chronic Toxicity: No data Not classified.
12.2	Persistence and degradability	No data for the mixture as a whole.
	Manganese sulphate	Not applicable for inorganic substances
	Manganese Chloride	Not applicable for inorganic substances
	Sulfonated aromatic polymer, sodium salt	No data
	Alkyl naphthalenesulfonate, sodium salt	No data
12.3	Bioaccumulative potential	No data for the mixture as a whole.
	Manganese sulphate	Not relevant for this material.
	Manganese Chloride	Not relevant for this material.
	Sulfonated aromatic polymer, sodium salt	No data
	Alkyl naphthalenesulfonate, sodium salt	No data
12.4	Mobility in soil	No data for the mixture as a whole.
	Manganese sulphate	The substance is predicted to have high mobility in soil. Very soluble
	Manganese Chloride	The substance is predicted to have high mobility in soil. Very soluble
	Sulfonated aromatic polymer, sodium salt	No data
	Alkyl naphthalenesulfonate, sodium salt	No data
12.5	Results of PBT and VPVB assessment	None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of this material and its container as hazardous waste. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or national legislation. EWC: 02 01 08
13.2	Additional Information	None.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID	IMDG	IATA/ICAO
14.1	UN number	UN 3077	UN 3077	UN 3077
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID (Manganese sulphate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID (Manganese sulphate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID (Manganese sulphate)
14.3	Transport hazard class(es)	9	9	9
14.4	Packing group	III	III	III
14.5	Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant.	Environmentally hazardous substance
14.6	Special precautions for user	See Section: 2		
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	Not applicable.	Not applicable.
14.8	Additional Information	None.		

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15. SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.1.1 EU regulations**
Authorisations and/or Restrictions On Use Not restricted
- 15.1.2 National regulations**
Germany Water hazard class: 1
- 15.2 Chemical Safety Assessment**
A chemical safety assessment is not required under REACH.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / mixture classification. New format has been issued, all sections have been updated to include new information. Review SDS with care.

References:

Harmonised Classification(s) for Manganese sulphate (CAS No. 7785-87-7). Existing ECHA registration(s) for Manganese sulphate (CAS No. 7785-87-7), Manganese Chloride (CAS No. 7773-01-5)
Existing Safety Data Sheet (SDS).

Literature References:

1. Singh P.P. and Junnarkar A.Y. Behavioural and toxic profiles of some essential trace metals salts in mice and rats, Indian Journal of Pharmacology, 23(3): 153-159. 1991.
2. Santucci B., Cannistrachi C., Cristando A. and Picardo M. Interactions of sulphates of divalent metals in nickel-sulphate-sensitive patients, xperimental Dermatology. 5:79-83. 1996.
3. Bataineh H., Al-Hamood M.H. and Elbetieha A.M. Assessment of aggression, sexual behaviour and fertility in adult male rat following long-term ingestion of four industrial metal salts., Human and Experimental Toxicology, 17:570-576. 1998.
4. Järvinen R. and Ahlström A. Effect of dietary manganese level on tissue manganese, iron, copper and zinc concentrations in female rats and their foetuses, Medical Biology 53: 93-99. 1975.
5. Di Paolo J. A. The potentiation of lymphosarcomas in the mouse by manganous chloride. Federation Proceedings 23: 393. 1964.
6. Elbetieha A., Bataineh H., Darmani H and Hassan A-H. M. Effects of long-term exposure to manganese chloride on fertility of male and female mice. Toxicology Letters, 119:193-201. 2001.
7. Lipe G. W., Durhart H., Newport G. D., Slikker W and Ali S. F. Effect of manganese on the concentration of amino acids in different regions of the rat brain. Journal of environmental science and health. Part B, pesticides, food contaminants and agricultural wastes. 1: 119-132. 1999.
8. Davies P. and Brinkman S. Acute and chronic toxicity of manganese to exposed and unexposed Rainbow and brown trout, Federal aid project F-243-1, Colorado Division of Wildlife, Fort Collins, Colorado. 1994.

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP).	Classification Procedure
Acute Tox. 4; H302	Threshold Calculation
Eye Dam. 1; H318	Threshold Calculation
STOT RE. 2; H373	Threshold Calculation
Aquatic Chronic 2; H411	Summation Calculation

LEGEND

LTTEL: Long Term Exposure Limit
DNEL: Derived No Effect Level
PBT: PBT: Persistent, Bioaccumulative and Toxic

STEL: Short Term Exposure Limit
PNEC: Predicted No Effect Concentration
vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Acute Tox. 4; Acute toxicity, Category 4
Skin Irrit. 2; Skin corrosion/irritation, Category 2
Eye Dam. 1; Eye damage, category 1

Hazard Statement(s)

H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage.

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Eye Irrit. 2; Eye Irritation, Category 2

STOT RE 2; Specific target organ toxicity — repeated exposure, Category 2

Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic, Category 2

H319: Causes serious eye irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable