



# MacDermid Enthone

## Safety Data Sheet

### Section 1. Identification

**Product name** : ENTHONE M-5-N  
**Product code** : 135571  
**Product type** : Liquid.  
**Uses advised against** : Consumer, private households, general public  
**Date of issue/Date of revision** : March 17 2023.

Manufacturer - Supplier	Telephone no.:	Emergency phone:
MacDermid, Inc. MacDermid Enthone Inc. 245 Freight Street Waterbury, CT 06702	Tel: (203) 575-5700	UNITED STATES AND CANADA: Tel: 202-464-2554
MacDermid de Mexico S.A. de C.V. Norte 59 No. 896 Col. Industrial Vallejo Mexico, D.F. 02300 Mexico	Tel: 52 55 5078 3904	Tel: 01 800 002 1400 Tel: (55) 5559 1588
Anion Química Industrial S.A. Rua Eli Valter Cesar, 110 - Jardim Alvorada, CEP: 06612-130, Jandira, SP Brasil	Tel: + 55 11 4789-8585	Tel: 0800 707 7022 Tel: 0800 172 020
RevestSul Produtos Químicos Ltda. Rua Antônio Rasteiro Filho, 500 Parque Industrial José Garcia Gimenes CEP: 86183-751, Cambé, PR Brasil	Tel.: +55 043 3223 3550	Tel: 0800 707 7022 Tel: 0800 172 020
MacDermid Performance Solutions Canada Inc. 4530 Eastgate Parkway Mississauga, Ontario L4W 3W6 Canada	Tel: (905) 624-1065	UNITED STATES AND CANADA: Tel: 202-464-2554

### Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
AQUATIC HAZARD (ACUTE) - Category 3  
AQUATIC HAZARD (LONG-TERM) - Category 1

#### GHS label elements

##### Hazard pictograms






##### Signal word

: Danger

Continued on next page

## Section 2. Hazards identification

- Hazard statements** :  Causes skin irritation.  
Causes serious eye irritation.  
May cause cancer.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life.  
Very toxic to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** :  Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling.
- Response** :  Collect spillage. IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. 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 or attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Proprietary Polymer	30-40	-
2-(2-ethoxyethoxy)ethyl acetate	20-30	112-15-2
barium sulfate	10-20	7727-43-7
Inorganic cadmium compounds	10-20	-
Mica-group minerals	1-10	12001-26-2
Inorganic filler	1-10	-
Talc , not containing asbestiform fibres	1-10	14807-96-6
zinc Salt	1-10	-
crystalline silica, respirable powder	0.1-1.0	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Continued on next page

## Section 4. First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
sulfur oxides  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### Conditions for safe storage, including any incompatibilities

: Storage temperature: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Barium sulfate

**ACGIH TLV (United States, 3/2017). Notes: The value is for total dust containing no asbestos and < 1% crystalline silica.**

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction

**ACGIH TLV (United States, 2001).**

TWA: 10 mg/m<sup>3</sup> 8 hours.

**NIOSH REL (United States, 10/2016).**

TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction

TWA: 10 mg/m<sup>3</sup> 10 hours. Form: Total

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust

**OSHA PEL (United States, 6/2016).**

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust

Inorganic cadmium compounds

**OSHA PEL (United States, 2006).**

TWA: 0.005 mg/m<sup>3</sup> 8 hours. Form: As Cadmium

**ACGIH TLV (United States, 1/2021). Notes: as Cd**

TWA: 0.002 mg/m<sup>3</sup>, (as Cd) 8 hours. Form: Respirable fraction

Mica-group minerals

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Respirable dust

**NIOSH REL (United States, 10/2016).**

TWA: 3 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction

**ACGIH TLV (United States, 2002).**

TWA: 3 mg/m<sup>3</sup> 8 hours.

**OSHA PEL Z3 (United States, 6/2016).**

TWA: 20 mppcf 8 hours.

**ACGIH TLV (United States, 3/2017). Notes: Respirable fraction; see Appendix C, paragraph C.**

TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

## Section 8. Exposure controls/personal protection

Inorganic filler

**OSHA PEL (United States, 6/2016).**

TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust

**ACGIH TLV (United States, 3/2017). Notes: Substance identified by other sources as a suspected or confirmed human carcinogen. 1996 Adoption Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) : 36338-33351, June 30, 1993, for revised OSHA PEL. Refers to Appendix A -- Carcinogens.**

TWA: 10 mg/m<sup>3</sup> 8 hours.

Talc , not containing asbestiform fibres

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable dust

**NIOSH REL (United States, 10/2016).**

TWA: 2 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction

**ACGIH TLV (United States, 3/2017).**

TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

crystalline silica, respirable powder

**OSHA PEL Z3 (United States, 6/2016).**

TWA: 10 mg/m<sup>3</sup> / (%SiO<sub>2</sub>+2) 8 hours. Form: Respirable

TWA: 250 mppcf / (%SiO<sub>2</sub>+5) 8 hours. Form: Respirable

**OSHA PEL (United States, 6/2016).**

TWA: 50 µg/m<sup>3</sup> 8 hours. Form: Respirable dust

**OSHA PEL 1989 (United States, 3/1989). Notes: as quartz**

TWA: 0.1 mg/m<sup>3</sup>, (as quartz) 8 hours. Form: Respirable dust

**ACGIH TLV (United States, 3/2017). Notes: Respirable fraction; see Appendix C, paragraph C.**

TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

**NIOSH REL (United States, 10/2016). Notes: See Appendix A - NIOSH Potential Occupational Carcinogen**

TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: respirable dust

### Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

##### Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.








## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid. [Viscous liquid.]
- Color** : Green.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : >204.44°C (>400°F)
- Flash point** : Closed cup: >93.333°C (>200°F) [Setaflash]
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** :  Not available.
- Relative vapor density** : Not available.
- Relative density** : 1.63
- Solubility** : Not available.
- VOC** :  59.1 g/l
- Partition coefficient: n-octanol/water** :  Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Flow time (ISO 2431)** :  Not available.
- Particle characteristics**
- Median particle size** :  Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Incompatibility with various substances</b>	: Reactive or incompatible with the following materials: oxidizing materials, metals, acids and moisture.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Hazardous polymerization</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-ethoxyethoxy)ethyl acetate	LD50 Dermal	Rabbit	15000 mg/kg	-
Inorganic cadmium compounds	LD50 Oral	Rat	11000 mg/kg	-
zinc Salt	LD50 Oral	Rat	7080 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5040 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	>2000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-(2-ethoxyethoxy)ethyl acetate	Eyes - Moderate irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Inorganic filler	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
Talc , not containing asbestiform fibres	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

#### Sensitization

Not available.

#### Mutagenicity

Product/ingredient name	Test	Experiment	Result
Inorganic cadmium compounds	-	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ	Positive
	-	Experiment: In vitro Subject: Mammalian-Human Cell: Germ	Positive

#### Carcinogenicity

Not available.

**Additional information:** : **Inorganic filler:** Carcinogen status based on inhalation of particulate form of this chemical If this product is a liquid, exposure to this particulate is unlikely under ordinary conditions of use.

#### Classification



## Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Inorganic cadmium compounds	+	1	Known to be a human carcinogen.
Inorganic filler	-	2B	-
Talc , not containing asbestiform fibres	-	3	-
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
crystalline silica, respirable powder	Category 1	inhalation	respiratory tract

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Inorganic cadmium compounds	Category 1	-	-
crystalline silica, respirable powder	Category 1	-	kidneys, respiratory tract

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness  
**Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

Continued on next page

## Section 11. Toxicological information

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

#### Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

#### Potential chronic health effects

Not available.

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

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	40434.8 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
2-(2-ethoxyethoxy)ethyl acetate	LC50 110 mg/l	Fish	96 hours
barium sulfate	Acute EC50 634 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
Inorganic cadmium compounds	Acute EC50 32000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 11 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 108 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
Inorganic filler	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
zinc Salt	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
	Acute LC50 >30000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1826000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Continued on next page

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-(2-ethoxyethoxy)ethyl acetate	0.76	3.2	low
Inorganic cadmium compounds	-	1345	high
zinc Salt	-	60960	high

### Mobility in soil











Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	UN	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)
Transport hazard class(es)	-	9  	9  	9  	9  	9  
Packing group	-	III	III	III	III	III
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.	Yes.

## Section 14. Transport information

<b>Additional information - TDG Classification</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
<b>Additional information - Mexico Classification</b>	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
<b>Additional information - UN Classification</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
<b>Additional information - IMDG Classification</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
<b>Additional information - IATA Classification</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**Special precautions for user** : **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 5(a)2 proposed significant new use rule (SNUR): No products were found.  
TSCA 5(a)2 final significant new use rule (SNUR): No products were found.  
TSCA 12(b) one-time export notification: No products were found.  
TSCA 12(b) annual export notification: No products were found.


**United States inventory (TSCA 8b)** : All components are listed or exempted.

### SARA 302/304

#### Composition/information on ingredients

No products were found.

### SARA 311/312

**Classification** :  SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### SARA 313

## Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	<input checked="" type="checkbox"/> (2-ethoxyethoxy)ethyl acetate	112-15-2	20-30
	Inorganic cadmium compounds	-	10-20
	zinc Salt	-	1-10
	hexachlorobenzene	118-74-1	0.00001-0.0001
Supplier notification	<input checked="" type="checkbox"/> (2-ethoxyethoxy)ethyl acetate	112-15-2	20-30
	Inorganic cadmium compounds	-	10-20
	zinc Salt	-	1-10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### California Prop. 65

 **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Canada

Canada inventory : All components are listed or exempted.

### International regulations

#### Inventory list

Australia : Not determined.  
China : ☒ All components are listed or exempted.  
Japan : Not determined.  
New Zealand : Not determined.  
Philippines : ☒ All components are listed or exempted.  
Republic of Korea : Not determined.  
Taiwan : ☒ All components are listed or exempted.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	<input checked="" type="checkbox"/> 2
Flammability	<input checked="" type="checkbox"/> 1
Physical hazards	<input checked="" type="checkbox"/> 0

### Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 3	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method

### History

Date of issue/Date of revision : 3/17/2023  
Date of previous issue : 1/27/2020  
Version : 1.08

Regulatory Affairs Department  
[enthone.msds@macdermidenthone.com](mailto:enthone.msds@macdermidenthone.com)

## Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

### References

: Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.