# MacDermid Enthone

## Safety Data Sheet

## Section 1. Identification

| Product name  | : ENTHONE® 50-506BR  |
|---|--|
| Product code  | : 135683   |
| Uses advised against<br>Product type<br>Date of issue/Date of | <ul> <li>Consumer, private households, general public</li> <li>Liquid.</li> <li>June 26 2019.</li> </ul> |
| revision  |  |

| Manufacturer - Supplier  | Telephone no.:          | Emergency phone:  |
|--|-------------------------|---|
| MacDermid, Inc.<br>MacDermid Enthone Inc.<br>245 Freight Street<br>Waterbury, CT 06702   | Tel: (203) 575-5700     | UNITED STATES AND CANADA:<br>Tel: 800-424-9300<br>INTERNATIONAL, CALL<br>Tel: +1 703-527-3887 (collect calls<br>accepted) |
| MacDermid Enthone de Mexico S.A. De C.V.<br>Norte 59 No. 896<br>Col. Industrial Vallejo<br>Mexico, D.F. 02300<br>Mexico                              | Tel: 52 55 5078 3904    | Tel: 01 800 002 1400<br>Tel: (55) 5559 1588   |
| Anion Química Industrial S.A.<br>Rua Eli Valter Cesar, 110 - Jardim Alvorada,<br>CEP: 06612-130, Jandira, SP<br>Brasil                               | Tel: + 55 11 4789-8585  | Tel: 0800 707 7022<br>Tel: 0800 172 020   |
| RevestSul Produtos Químicos Ltda.<br>Rua Antônio Rasteiro Filho, 500<br>Parque Industrial José Garcia Gimenes<br>CEP: 86183-751, Cambé, PR<br>Brasil | Tel.: +55 043 3223 3550 | Tel: 0800 707 7022<br>Tel: 0800 172 020   |
| MacDermid Performance Solutions Canada<br>Inc.<br>4530 Eastgate Parkway<br>Mississauga, Ontario L4W 3W6<br>Canada                                    | Tel: (905) 624-1065     | DOMESTIC NORTH AMERICA<br>800-424-9300<br>INTERNATIONAL, CALL<br>+1 703-527-3887 (collect calls<br>accepted)              |

## Section 2. Hazards identification

| OSHA/HCS status                            | <ul> <li>This material is considered hazardous by the OSHA Hazard Communication Standard<br/>(29 CFR 1910.1200).</li> </ul>  |
|--|--|
| Classification of the substance or mixture | <ul> <li>FLAMMABLE LIQUIDS - Category 4         ACUTE TOXICITY (inhalation) - Category 2         SKIN IRRITATION - Category 2         EYE IRRITATION - Category 2A         CARCINOGENICITY - Category 1B         TOXIC TO REPRODUCTION (Unborn child) - Category 1A         TOXIC TO REPRODUCTION (Fertility) - Category 2         AQUATIC HAZARD (ACUTE) - Category 2         AQUATIC HAZARD (LONG-TERM) - Category 2         </li> </ul> |

#### **GHS label elements**

## Section 2. Hazards identification

| Hazard pictograms                   |  |
|-------------------------------------|--|
| Signal word                         | : Danger   |
| Hazard statements                   | <ul> <li>Combustible liquid.</li> <li>Fatal if inhaled.</li> <li>Causes serious eye irritation.</li> <li>Causes skin irritation.</li> <li>May cause cancer.</li> <li>May damage the unborn child.</li> <li>Suspected of damaging fertility.</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>   |
| Precautionary statements            |  |
| Prevention                          | : Obtain special instructions before use. Do not handle until all safety precautions have<br>been read and understood. Wear protective gloves. Wear eye or face protection.<br>Wear protective clothing. Wear respiratory protection. Keep away from flames and hot<br>surfaces No smoking. Use only outdoors or in a well-ventilated area. Avoid release<br>to the environment. Do not breathe vapor. Wash hands thoroughly after handling.   |
| Response                            | : Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED:<br>Remove person to fresh air and keep comfortable for breathing. Immediately call a<br>POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water.<br>Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get<br>medical attention. IF IN EYES: Rinse cautiously with water for several minutes.<br>Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation<br>persists: Get medical attention. |
| Storage                             | : Store locked up. Store in a well-ventilated place. Keep cool.  |
| Disposal                            | : Dispose of contents and container in accordance with all local, regional, national and international regulations.  |
| Hazards not otherwise<br>classified | : None known.  |

## Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

| Ingredient name                 | %       | CAS number |
|---------------------------------|---------|------------|
| Proprietary Polymer             | 40-50   | -          |
| 2-(2-ethoxyethoxy)ethyl acetate | 10-20   | 112-15-2   |
| lead chromate                   | 10-20   | 7758-97-6  |
| (2-methoxymethylethoxy)propanol | 10-20   | 34590-94-8 |
| 2-methoxy-1-methylethyl acetate | 1-10    | 108-65-6   |
| petroleum solvent naphtha       | 1-10    | -          |
| antimony trioxide               | 0.1-1.0 | 1309-64-4  |

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 as hazardous to health or the environment 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  | <ul> <li>Check for and remove any contact lenses. Immediately flush eyes with running water<br/>for at least 30 minutes, keeping eyelids open. Get medical attention.</li> </ul>  |
|--------------|---|
| Inhalation   | : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 : Fatal if inhaled. **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

## Section 4. First aid measures

| Notes to physician         | : In case of inhalation of decomposition products in a fire, symptoms may be delayed.<br>The exposed person may need to be kept under medical surveillance for 48 hours.  |
|----------------------------|---|
| 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 dry chemical, CO2, water spray (fog) or foam.   |
| Unsuitable extinguishing media                 | : Do not use water jet.   |
| Specific hazards arising from the chemical     | : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is 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:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  |
| 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, protect  | tiv | e equipment and emergency procedures   |
|--------------------------------|-----|--|
| For non-emergency<br>personnel | :   | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilled material. Shut off all ignition sources.<br>No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide<br>adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put<br>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<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to<br>the environment if released in large quantities. Collect spillage.  |

### Section 6. Accidental release measures

#### Methods and materials for containment and cleaning up

| Small spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. |
|-------------|--|
|             | Stop look if without rick. Move containers from spill area. Use spark proof tools and  |

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container. : Eating, drinking and smoking should be prohibited in areas where this material is Advice on general handled, stored and processed. Workers should wash hands and face before eating, occupational hygiene drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Storage temperature: 5 to 40°C (41 to 104°F). Store in accordance with local Conditions for safe storage, : regulations. Store in a segregated and approved area. Store in original container including any protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatibilities incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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

## Section 8. Exposure controls/personal protection

| Ingredient name                 | Exposure limits  |
|---------------------------------|--|
| lead chromate                   | ACGIH TLV (United States, 2/2003).<br>TWA: 0.012 mg/m <sup>3</sup> 8 hours. Form: As Chromium<br>ACGIH TLV (United States, 2001).<br>TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: As Lead<br>OSHA PEL (United States, 4/2006).<br>TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: As Lead<br>OSHA PEL Z2 (United States, 2/2013).<br>CEIL: 1 mg/10m <sup>3</sup><br>OSHA PEL (United States, 6/2016).<br>TWA: 0.005 mg/m <sup>3</sup> , (as Cr) 8 hours.<br>TWA: 50 µg/m <sup>3</sup> , (as Pb) 8 hours.<br>NIOSH REL (United States, 10/2016).<br>TWA: 0.0002 mg/m <sup>3</sup> , (as CR) 8 hours.<br>ACGIH TLV (United States, 3/2017). Notes: measured as Cr<br>TWA: 0.012 mg/m <sup>3</sup> , (measured as Cr) 8 hours.<br>OSHA PEL 1989 (United States, 3/1989). Notes: as CrO3<br>CEIL: 0.1 mg/m <sup>3</sup> , (as CrO3)<br>OSHA PEL 1989 (United States, 3/1989). Notes: as Pb<br>TWA: 50 µg/m <sup>3</sup> , (as Pb) 8 hours.  |
| (2-methoxymethylethoxy)propanol | <ul> <li>ACGIH TLV (United States, 3/2017). Absorbed through skin.<br/>STEL: 909 mg/m<sup>3</sup> 15 minutes.<br/>STEL: 150 ppm 15 minutes.<br/>TWA: 606 mg/m<sup>3</sup> 8 hours.<br/>TWA: 100 ppm 8 hours.</li> <li>NIOSH REL (United States, 10/2016). Absorbed through skin.<br/>STEL: 900 mg/m<sup>3</sup> 15 minutes.<br/>STEL: 150 ppm 15 minutes.<br/>TWA: 600 mg/m<sup>3</sup> 10 hours.<br/>TWA: 600 mg/m<sup>3</sup> 10 hours.<br/>TWA: 100 ppm 10 hours.</li> <li>OSHA PEL (United States, 6/2016). Absorbed through skin.<br/>TWA: 600 mg/m<sup>3</sup> 8 hours.<br/>TWA: 100 ppm 8 hours.</li> <li>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.<br/>STEL: 900 mg/m<sup>3</sup> 15 minutes.<br/>STEL: 150 ppm 15 minutes.</li> <li>TWA: 100 ppm 8 hours.<br/>TWA: 100 ppm 8 hours.</li> <li>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.<br/>STEL: 900 mg/m<sup>3</sup> 15 minutes.<br/>STEL: 150 ppm 15 minutes.</li> <li>TWA: 600 mg/m<sup>3</sup> 8 hours.<br/>TWA: 600 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 600 mg/m<sup>3</sup> 8 hours.</li> </ul> |
| 2-methoxy-1-methylethyl acetate | AIHA WEEL (United States, 10/2011).  |
| petroleum solvent naphtha       | TWA: 50 ppm 8 hours.<br>Manufacturer (in Switzerland or another country) (United States,<br>2/2006).<br>TWA: 100 ppm 8 hours.  |
| antimony trioxide               | <ul> <li>ACGIH TLV (United States, 3/2017). Notes: as Sb<br/>TWA: 0.5 mg/m<sup>3</sup>, (as Sb) 8 hours.</li> <li>OSHA PEL (United States, 6/2016). Notes: as Sb<br/>TWA: 0.5 mg/m<sup>3</sup>, (as Sb) 8 hours.</li> <li>OSHA PEL 1989 (United States, 3/1989). Notes: as Sb<br/>TWA: 0.5 mg/m<sup>3</sup>, (as Sb) 8 hours.</li> <li>NIOSH REL (United States, 10/2016).</li> <li>TWA: 0.5 mg/m<sup>3</sup>, (as Sb) 10 hours.</li> </ul>  |

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

| Environmental exposure controls | :           | Emissions from ventilation or work process equipment should be checked to ensure<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process equipment<br>will be necessary to reduce emissions to acceptable levels.  |
|---------------------------------|-------------|--|
| Individual protection meas      | <u>ures</u> |  |
| Hygiene measures                | :           | Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing. Ensure that eyewash stations and safety<br>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<br>worn at all times when handling chemical products if a risk assessment indicates this is<br>necessary. Considering the parameters specified by the glove manufacturer, check<br>during use that the gloves are still retaining their protective properties. It should be<br>noted that the time to breakthrough for any glove material may be different for different<br>glove manufacturers. In the case of mixtures, consisting of several substances, the<br>protection time of the gloves cannot be accurately estimated. |
| 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

| <u>Appearance</u>                            |   |
|--|---|
| Physical state                               | : Liquid.   |
| Color  | : Red.  |
| Odor   | : Mild.   |
| Odor threshold                               | : Not available.  |
| рН   | : Not available.  |
| Melting point                                | : Not available.  |
| Boiling point                                | : 160°C (320°F)   |
| Flash point                                  | : Closed cup: 62.78°C (145°F) [Setaflash]   |
| Evaporation rate                             | : Not available.  |
| Flammability (solid, gas)                    | : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. |
| Lower and upper explosive (flammable) limits | : Not available.  |
| Vapor pressure                               | : Not available.  |
| Vapor density                                | : Not available.  |
| Relative density                             | : 1.3   |

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## Section 9. Physical and chemical properties

| Solubility                                 | 1 | Not available. |
|--|---|----------------|
| VOC  | : | 482 g/l        |
| Partition coefficient: n-<br>octanol/water | ; | Not available. |
| Auto-ignition temperature                  | : | Not available. |
| Decomposition temperature                  | : | Not available. |
| Viscosity                                  | : | Not available. |
| Aerosol product                            |   |                |

## Section 10. Stability and reactivity

| Reactivity                                | No specific test data related to reactivity available for this product or its ingredie   | ents.    |
|---|--|----------|
| Chemical stability                        | The product is stable.   |          |
| Possibility of hazardous<br>reactions     | Under normal conditions of storage and use, hazardous reactions will not occur   |          |
| Conditions to avoid                       | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, w<br>praze, solder, drill, grind or expose containers to heat or sources of ignition. | veld,    |
| Incompatibility with various substances   | Reactive or incompatible with the following materials: oxidizing materials, comb naterials, organic materials, acids and alkalis.                                      | ustible  |
| Hazardous decomposition<br>products       | Under normal conditions of storage and use, hazardous decomposition product not be produced.   | s should |
| Other Hazardous<br>decomposition products | carbon oxides (CO, $CO_2$ ), nitrogen oxides (NO, $NO_2$ etc.), metal oxides   |          |
| Hazardous polymerization                  | Under normal conditions of storage and use, hazardous polymerization will not  | occur.   |

## Section 11. Toxicological information

: Inhalation. Ingestion.

| Acute toxicity                  |                       |         |                        |          |
|---------------------------------|-----------------------|---------|------------------------|----------|
| Product/ingredient name         | Result                | Species | Dose                   | Exposure |
| 2-(2-ethoxyethoxy)ethyl acetate | LD50 Dermal           | Rabbit  | 15000 mg/kg            | -        |
|                                 | LD50 Oral             | Rat     | 11000 mg/kg            | -        |
| lead chromate                   | LD50 Oral             | Mouse   | >12000 mg/kg           | -        |
| 2-methoxy-1-methylethyl acetate | LD50 Dermal           | Rabbit  | >5 g/kg                | -        |
|                                 | LD50 Oral             | Rat     | 8532 mg/kg             | -        |
| petroleum solvent naphtha       | LC50 Inhalation Vapor | Rat     | >590 mg/m <sup>3</sup> | 4 hours  |
|                                 | LD50 Dermal           | Rabbit  | >2000 mg/kg            | -        |
|                                 | LD50 Oral             | Rat     | 3200 mg/kg             | -        |
| antimony trioxide               | LD50 Oral             | Rat     | >20 g/kg               | -        |

Irritation/Corrosion

**Routes of entry** 

| Product/ingredient name          | Result                   | Species | Score | Exposure                   | Observation |
|----------------------------------|--------------------------|---------|-------|----------------------------|-------------|
| 2-(2-ethoxyethoxy)ethyl acetate  | Eyes - Moderate irritant | Rabbit  | -     | 500<br>milligrams          | -           |
|                                  | Skin - Mild irritant     | Rabbit  | -     | 500<br>milligrams          | -           |
| (2-methoxymethylethoxy) propanol | Eyes - Mild irritant     | Human   | -     | 8 milligrams               | -           |
| r - F                            | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500<br>milligrams | -           |
|                                  | Skin - Mild irritant     | Rabbit  | -     | 500                        | -           |

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## Section 11. Toxicological information

| petroleum solvent naphtha | Skin - Mild irritant | Rabbit | - | milligrams<br>24 hours 500       | - |
|---------------------------|----------------------|--------|---|----------------------------------|---|
| antimony trioxide         | Eyes - Mild irritant | Rabbit | - | microliters<br>100<br>milligrams | - |

#### **Sensitization**

Not available.

#### **Mutagenicity**

| Product/ingredient name | Test | Experiment  | Result               |
|-------------------------|------|---|----------------------|
| lead chromate           | -    | Experiment: In vitro<br>Subject: Mammalian-Human<br>Cell: Somatic | Positive             |
| antimony trioxide       | -    | Subject: Mammalian-Animal<br>Subject: Bacteria                    | Positive<br>Positive |

#### **Carcinogenicity**

No applicable toxicity data

#### Additional information:

#### **Classification**

| Product/ingredient name | OSHA | IARC | NTP                             |
|-------------------------|------|------|---------------------------------|
| lead chromate           | +    | 1    | Known to be a human carcinogen. |
| antimony trioxide       | -    | 2B   | -                               |

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

| Name                      | Result                         |
|---------------------------|--------------------------------|
| petroleum solvent naphtha | ASPIRATION HAZARD - Category 1 |

| Information on the likely routes of exposure | : Routes of entry anticipated: Oral, Inhalation.   |
|--|--|
| Potential acute health effects               |  |
| Eye contact                                  | : Causes serious eye irritation.   |
| Inhalation                                   | : Fatal if inhaled.  |
| Skin contact                                 | : Causes skin irritation.  |
| Ingestion                                    | : No known significant effects or critical hazards.  |
| Symptoms related to the phy<br>Eye contact   | <ul> <li>sical, chemical and toxicological characteristics</li> <li>Adverse symptoms may include the following:<br/>pain or irritation<br/>watering<br/>redness</li> </ul> |

## Section 11. Toxicological information

|                                |            | 5  |
|--------------------------------|------------|--|
| Inhalation                     | :          | Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations                          |
| Skin contact                   | :          | Adverse symptoms may include the following:<br>irritation<br>redness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations |
| Ingestion                      | :          | Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations                          |
| Delayed and immediate effect   | <u>ts:</u> | and also chronic effects from short and long term exposure   |
| Short term exposure            |            |  |
| Potential immediate<br>effects | :          | Not available.   |
| Potential delayed effects      | :          | Not available.   |
| Long term exposure             |            |  |
| Potential immediate<br>effects | :          | Not available.   |
| Potential delayed effects      | :          | Not available.   |
| Potential chronic health effe  | <u>ect</u> | <u>s</u>   |
| General                        | 1          | No known significant effects or critical hazards.  |
| Carcinogenicity                | 1          | May cause cancer. Risk of cancer depends on duration and level of exposure.  |
| Mutagenicity                   | 1          | No known significant effects or critical hazards.  |
| Teratogenicity                 | 1          | May damage the unborn child.   |
| <b>Developmental effects</b>   | 1          | No known significant effects or critical hazards.  |
| Fertility effects              | 1          | Suspected of damaging fertility.   |
|                                |            |  |

#### **Numerical measures of toxicity**

## Acute toxicity estimates Route ATE value Oral 70018.4 mg/kg Inhalation (vapors) 1.505 mg/l

## Section 12. Ecological information

| Product/ingredient name             | Result                          | Species                                    | Exposure |
|-------------------------------------|---------------------------------|--|----------|
| 2-(2-ethoxyethoxy)ethyl acetate     | LC50 110 mg/l                   | Fish                                       | 96 hours |
| (2-methoxymethylethoxy)<br>propanol | EC50 >969 mg/l                  | Algae                                      | 96 hours |
| 2-methoxy-1-methylethyl acetate     | Acute EC50 500 mg/l             | Daphnia                                    | 48 hours |
|                                     | Acute LC50 161 mg/l             | Fish                                       | 96 hours |
| antimony trioxide                   | Acute EC50 730 µg/l Fresh water | Algae - Pseudokirchneriella<br>subcapitata | 72 hours |
|                                     | Acute EC50 740 µg/l Fresh water | Algae - Pseudokirchneriella                | 96 hours |

#### Continued on next page

## Section 12. Ecological information

| Acute EC50 560 mg/l Fresh water<br>Acute EC50 423450 μg/l Fresh water | subcapitata<br>Crustaceans - Cypris subglobosa<br>Daphnia - Daphnia magna<br>Fish - Lepomis macrochirus -<br>Young of the year | 48 hours<br>48 hours<br>96 hours |
|---|--|----------------------------------|
| Chronic NOEC 200 µg/l Fresh water                                     | Algae - Pseudokirchneriella<br>subcapitata   | 96 hours                         |

Persistence and degradability

#### Not available.

#### **Bioaccumulative potential**

| Product/ingredient name          | LogPow           | BCF        | Potential                             |
|----------------------------------|------------------|------------|---------------------------------------|
| 2-(2-ethoxyethoxy)ethyl acetate  | 0.76             | 3.2        | low                                   |
| (2-methoxymethylethoxy) propanol | 0.004            | -          | low                                   |
| 2-methoxy-1-methylethyl acetate  | 1.2              | -          | low                                   |
| petroleum solvent naphtha        | 2.8 to 6.5       | 99 to 5780 | high                                  |
| Mobility in soil                 | ·                | ·          | · · · · · · · · · · · · · · · · · · · |
| Soil/water partition             | : Not available. |            |                                       |

| WODINLY IN SOIL  |   |
|--|---|
| Soil/water partition<br>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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

|                               | DOT<br>Classification | TDG<br>Classification | Mexico<br>Classification | UN             | IMDG           | ΙΑΤΑ           |
|-------------------------------|-----------------------|-----------------------|--------------------------|----------------|----------------|----------------|
| UN number                     | Not regulated.        | Not regulated.        | Not regulated.           | Not regulated. | Not regulated. | Not regulated. |
| UN proper<br>shipping name    | -                     | -                     | -                        | -              | -              | -              |
| Transport<br>hazard class(es) | -                     | -                     | -                        | -              | -              | -              |
| Packing group                 | -                     | -                     | -                        | -              | -              | -              |

## Section 14. Transport information

## Section 14. Transport information

| Environmental<br>hazards | No. | No. | No. | No. | No. | No. |
|--------------------------|-----|-----|-----|-----|-----|-----|

## 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: lead chromate                                      |
|                                      | TSCA 12(b) annual export notification: No products were found.                 |
| United States inventory<br>(TSCA 8b) | : All components are listed or exempted.                                       |
| <u>SARA 302/304</u>                  |  |
| Composition/information              | n on ingredients   |
| No products were found.              |  |
|                                      |  |

#### SARA 311/312

| Classification | : Fire hazard                   |
|----------------|---------------------------------|
|                | Immediate (acute) health hazard |
|                | Delayed (chronic) health hazard |

#### SARA 313

|                                 | Product name                    | CAS number  | %        |
|---------------------------------|---------------------------------|-------------|----------|
| Form R - Reporting requirements | 2-(2-ethoxyethoxy)ethyl acetate | 112-15-2    | 10-20    |
|                                 | lead chromate                   | 7758-97-6   | 10-20    |
|                                 | (2-methoxymethylethoxy)propanol | 34590-94-8  | 10-20    |
|                                 | antimony trioxide               | 1309-64-4   | 0.1-1    |
|                                 | Lead compounds                  | proprietary | 0.01-0.1 |
| Supplier notification           | 2-(2-ethoxyethoxy)ethyl acetate | 112-15-2    | 10-20    |
|                                 | lead chromate                   | 7758-97-6   | 10-20    |
|                                 | antimony trioxide               | 1309-64-4   | 0.1-1    |

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:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

#### <u>Canada</u>

Canada

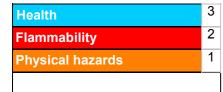
: At least one component is not listed in DSL but all such components are listed in NDSL.

#### International lists

**National inventory** 

## Section 16. Other information

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



#### Procedure used to derive the classification

| Classification                | Justification         |
|-------------------------------|-----------------------|
| Flam. Liq. 4, H227            | On basis of test data |
| Acute Tox. 2, H330            | Calculation method    |
| Skin Irrit. 2, H315           | Calculation method    |
| Eye Irrit. 2A, H319           | Calculation method    |
| Carc. 1B, H350                | Calculation method    |
| Repr. 1A, H360 (Unborn child) | Calculation method    |
| Repr. 2, H361 (Fertility)     | Calculation method    |
| Aquatic Acute 2, H401         | Calculation method    |
| Aquatic Chronic 2, H411       | Calculation method    |

| <u>History</u>                 |  |
|--------------------------------|--|
| Date of issue/Date of revision | : June 26 2019.  |
| Date of previous issue         | : August 31 2018.  |
| Version                        | : 1.05   |
| Prepared by                    | : Regulatory Affairs Department<br>enthone.msds@macdermidenthone.com |

| Key to abbreviations | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = International Air Transport Association<br>IBC = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973<br>as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |
|----------------------|--|
|----------------------|--|

#### 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.