# **SAFETY DATA SHEET**

| Section 1. Identification                                  |   |  |
|--|---|--|
| GHS product identifier                                     | :   |  |
| Document product code                                      | · · · · · · · · · · · · · · · · · · ·             |  |
| Other means of<br>identification                           | : Not available.                                  |  |
| Product type   | : Liquid.   |  |
| Relevant identified uses of                                | the substance or mixture and uses advised against |  |
| Identified uses  |   |  |
| Supplier/Manufacturer                                      | :   |  |
| Emergency telephone<br>number (with hours of<br>operation) | :   |  |

# 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>SKIN CORROSION/IRRITATION - Category 2<br/>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A<br/>SKIN SENSITIZATION - Category 1<br/>CARCINOGENICITY - Category 2<br/>AQUATIC HAZARD (ACUTE) - Category 3<br/>AQUATIC HAZARD (LONG-TERM) - Category 2</li> </ul> |
| GHS label elements<br>Hazard pictograms    |  |
| Signal word                                | : Warning  |



# Section 2. Hazards identification

| Hazard statements                   | : H319 - Causes serious eye irritation.<br>H315 - Causes skin irritation.   |
|-------------------------------------|---|
|                                     | H317 - May cause an allergic skin reaction.   |
|                                     | H351 - Suspected of causing cancer.   |
|                                     | H411 - Toxic to aquatic life with long lasting effects.   |
| Precautionary statements            |   |
| Prevention                          | <ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.</li> <li>P273 - Avoid release to the environment.</li> <li>P261 - Avoid breathing vapor.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.</li> </ul>  |
| Response                            | <ul> <li>P391 - Collect spillage.</li> <li>P308 + P313 - IF exposed or concerned: Get medical attention.</li> <li>P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical attention.</li> <li>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337 + P313 - If eye irritation persists: Get medical attention.</li> </ul> |
| Storage                             | : P405 - Store locked up.   |
| Disposal                            | : P501 - Dispose of contents and container in accordance with all local, regional, national<br>and international regulations.   |
| Hazards not otherwise<br>classified | : None known.   |

# Section 3. Composition/information on ingredients

| Substance/mixture | : Mixture        |
|-------------------|------------------|
| Other means of    | : Not available. |
| identification    |                  |

| Ingredient name   | %         | CAS number |
|---|-----------|------------|
| Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer | ≥50 - ≤75 | 25085-99-8 |
| Nepheline syenite   | ≥10 - <20 | 37244-96-5 |
| Benzyl alcohol  | ≥5 - ≤10  | 100-51-6   |
| Titanium dioxide  | ≥5 - ≤10  | 13463-67-7 |
| 2,2-bis(Acryloyloxymethyl)butyl acrylate  | ≥5 - ≤10  | 15625-89-5 |
| 2-Butoxyethanol   | ≥1 - ≤3   | 111-76-2   |
| N-methyl-2-pyrrolidone  | ≤0.3      | 872-50-4   |

Since the carcinogenic ingredients in this compound are encapsulated, the risk of exposure by inhalation is minimum when used in accordance with the user documentation.

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

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

| <b>Description of necess</b> | sary first aid measures   |
|------------------------------|---|
| Eye contact                  | <ul> <li>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower<br/>eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20<br/>minutes. Get medical attention.</li> </ul>   |
| 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.  |
| Skin contact                 | : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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 | 2  |   |
|--------------------------------|----|---|
| Eye contact                    | ÷  | Causes serious eye irritation.  |
| Inhalation                     | :  | No known significant effects or critical hazards.   |
| Skin contact                   | ÷  | Causes skin irritation. May cause an allergic skin reaction.  |
| Ingestion                      | ÷  | No known significant effects or critical hazards.   |
| Over-exposure signs/sympto     | m  | <u>IS</u>   |
| Eye contact                    | :  | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| Inhalation                     | ÷  | No known significant effects or critical hazards.   |
| Skin contact                   | :  | Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion                      | :  | No known significant effects or critical hazards.   |
| Indication of immediate medic  | al | 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. 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 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>metal oxide/oxides  |
| Special protective actions for fire-fighters   | <ul> <li>Promptly isolate the scene by removing all persons from the vicinity of the incident if<br/>there is a fire. No action shall be taken involving any personal risk or without suitable<br/>training.</li> </ul>   |
| 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<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. Avoid breathing vapor or mist.<br>Provide adequate ventilation. Wear appropriate respirator when ventilation is<br>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<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.  |

## Methods and materials for containment and cleaning up

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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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. See also Section 8 for additional information on hygiene measures.  |
| Conditions for safe storage,<br>including any<br>incompatibilities | : | 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**

## **United States**

# Occupational exposure limits

| Ingredient name   | Exposure limits  |
|---|--|
| Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, | None.  |
| homopolymer   |  |
| Nepheline syenite   | None.  |
| Benzyl alcohol  | AIHA WEEL (United States, 10/2011).                        |
|   | TWA: 10 ppm 8 hours.                                       |
| Titanium dioxide  | ACGIH TLV (United States, 3/2017).                         |
|   | TWA: 10 mg/m <sup>3</sup> 8 hours.                         |
|   | OSHA PEL (United States, 6/2016).                          |
|   | TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust        |
| 2,2-bis(Acryloyloxymethyl)butyl acrylate                                | AIHA WEEL (United States, 10/2011). Absorbed through skin. |
|   | TWA: 1 mg/m <sup>3</sup> 8 hours.                          |
| 2-Butoxyethanol   | ACGIH TLV (United States, 3/2017).                         |
|   | TWA: 20 ppm 8 hours.                                       |
|   | NIOSH REL (United States, 10/2016). Absorbed through skin. |
|   | TWA: 5 ppm 10 hours.                                       |
|   | TWA: 24 mg/m <sup>3</sup> 10 hours.                        |
|   | OSHA PEL (United States, 6/2016). Absorbed through skin.   |
|   | TWA: 50 ppm 8 hours.                                       |
|   |  |
|   | TWA: 240 mg/m <sup>3</sup> 8 hours.                        |
| N-methyl-2-pyrrolidone  | AIHA WEEL (United States, 10/2011). Absorbed through skin. |
|   | TWA: 10 ppm 8 hours.                                       |



# Section 8. Exposure controls/personal protection

# <u>Canada</u>

# **Occupational exposure limits**

| Ingredient name                     | _      |  | Exposure limits   |      |
|-------------------------------------|--------|--|---|------|
| Nepheline syenite                   |        |  | CA Ontario Provincial (Canada, 7/2015).   |      |
| Benzyl alcohol                      |        |  | TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust<br>AIHA WEEL (United States, 10/2011).  |      |
| Titanium dioxide                    |        |  | TWA: 10 ppm 8 hours.<br>CA British Columbia Provincial (Canada, 7/2016).  |      |
|                                     |        |  | TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Respirable dust<br>TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust  |      |
|                                     |        |  | CA Alberta Provincial (Canada, 4/2009).<br>8 hrs OEL: 10 mg/m <sup>3</sup> 8 hours.   |      |
|                                     |        |  | CA Ontario Provincial (Canada, 7/2015).   |      |
|                                     |        |  | TWA: 10 mg/m <sup>3</sup> 8 hours.<br>CA Quebec Provincial (Canada, 1/2014).  |      |
|                                     |        |  | TWAEV: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust   |      |
|                                     |        |  | CA Saskatchewan Provincial (Canada, 7/2013).<br>STEL: 20 mg/m <sup>3</sup> 15 minutes.  |      |
|                                     |        |  | TWA: 10 mg/m <sup>3</sup> 8 hours.  |      |
| 2,2-bis(Acryloyloxymethyl)butyl acr | rylate |  | AIHA WEEL (United States, 10/2011). Absorbed through skin.  |      |
| 2-Butoxyethanol                     |        |  | TWA: 1 mg/m³ 8 hours.<br>CA Alberta Provincial (Canada, 4/2009).  |      |
|                                     |        |  | 8 hrs OEL: 97 mg/m <sup>3</sup> 8 hours.  |      |
|                                     |        |  | 8 hrs OEL: 20 ppm 8 hours.<br>CA British Columbia Provincial (Canada, 7/2016).  |      |
|                                     |        |  | TWA: 20 ppm 8 hours.  |      |
|                                     |        |  | CA Ontario Provincial (Canada, 7/2015).<br>TWA: 20 ppm 8 hours.   |      |
|                                     |        |  | CA Quebec Provincial (Canada, 1/2014).  |      |
|                                     |        |  | TWAEV: 20 ppm 8 hours.<br>TWAEV: 97 mg/m <sup>3</sup> 8 hours.  |      |
|                                     |        |  | CA Saskatchewan Provincial (Canada, 7/2013).  |      |
|                                     |        |  | STEL: 30 ppm 15 minutes.<br>TWA: 20 ppm 8 hours.  |      |
| N-methyl-2-pyrrolidone              |        |  | CA Ontario Provincial (Canada, 7/2015).   |      |
|                                     |        |  | TWA: 400 mg/m <sup>3</sup> 8 hours.   |      |
| Appropriate engineering<br>controls | :      | local exhaust ventilation or   | dust, fumes, gas, vapor or mist, use process enclosures,<br>other engineering controls to keep worker exposure to<br>w any recommended or statutory limits.   |      |
| Environmental exposure controls     |        |  | or work process equipment should be checked to ensure ements of environmental protection legislation.   |      |
| Individual protection measu         |        |  |   |      |
| Hygiene measures                    | :      | eating, smoking and using t<br>Appropriate techniques sho<br>Contaminated work clothing  | face thoroughly after handling chemical products, before<br>he lavatory and at the end of the working period.<br>uld be used to remove potentially contaminated clothing.<br>g should not be allowed out of the workplace. Wash<br>re reusing. Ensure that eyewash stations and safety<br>orkstation location.  |      |
| Eye/face protection                 | :      | assessment indicates this is gases or dusts. If contact is   | with an approved standard should be used when a risk<br>s necessary to avoid exposure to liquid splashes, mists,<br>s possible, the following protection should be worn, unless<br>higher degree of protection: chemical splash goggles.  |      |
| Skin protection                     |        |  |   |      |
| Hand protection                     | :      | worn at all times when hand<br>necessary. Considering the<br>during use that the gloves a<br>noted that the time to break<br>glove manufacturers. In the | ous gloves complying with an approved standard should be<br>dling chemical products if a risk assessment indicates this is<br>a parameters specified by the glove manufacturer, check<br>are still retaining their protective properties. It should be<br>through for any glove material may be different for different<br>a case of mixtures, consisting of several substances, the<br>s cannot be accurately estimated. | is   |
|                                     |        | Tel · +1-888-GHS-7769 (44  | 47-7769) / +1-450-GHS-7767 (447-7767)   | 6/13 |

# Section 8. Exposure controls/personal protection

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

# Section 9. Physical and chemical properties

| <u>Appearance</u>                            |   |                |
|--|---|----------------|
| Physical state                               | 1 | Liquid.        |
| Color  | 1 | Not available. |
| Odor   | 1 | Not available. |
| Odor threshold                               | : | Not available. |
| рН   | : | Not available. |
| Melting point                                | 1 | Not available. |
| Boiling point                                | : | Not available. |
| Flash point                                  | : | Not available. |
| Evaporation rate                             | 1 | Not available. |
| Flammability (solid, gas)                    | : | Not available. |
| Lower and upper explosive (flammable) limits | : | Not available. |
| Vapor pressure                               | : | Not available. |
| Vapor density                                | : | Not available. |
| Relative density                             | 1 | Not available. |
| Solubility                                   | 1 | Not available. |
| Partition coefficient: n-<br>octanol/water   | : | Not available. |
| Auto-ignition temperature                    | : | Not available. |
| Decomposition temperature                    | : | Not available. |
| Viscosity                                    | : | Not available. |
| Flow time (ISO 2431)                         | : | Not available. |
| VOC = Volatile Organic<br>Compound           | : |                |

# Section 10. Stability and reactivity

| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|--|
| Chemical stability                 | : The product is stable.   |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.            |
| Conditions to avoid                | : No specific data.  |

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# Section 10. Stability and reactivity

## **Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

# Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

## Information on toxicological effects

## Acute toxicity

| Product/ingredient name                  | Result      | Species | Dose       | Exposure |
|--|-------------|---------|------------|----------|
| Benzyl alcohol                           | LD50 Dermal | Rabbit  | 2000 mg/kg | -        |
| ,  | LD50 Oral   | Rat     | 1230 mg/kg | -        |
| 2,2-bis(Acryloyloxymethyl)butyl acrylate | LD50 Dermal | Rabbit  | 5170 mg/kg | -        |
| 2-Butoxyethanol                          | LD50 Oral   | Rat     | 917 mg/kg  | -        |
| N-methyl-2-pyrrolidone                   | LD50 Dermal | Rabbit  | 8 g/kg     | -        |
|  | LD50 Oral   | Rat     | 3914 mg/kg | -        |

## Irritation/Corrosion

| Product/ingredient name                  | Result                   | Species | Score | Exposure        | Observation |
|--|--------------------------|---------|-------|-----------------|-------------|
| 2,2-bis(Acryloyloxymethyl)butyl acrylate | Eyes - Moderate irritant | Rabbit  | -     | 100 mg          | -           |
|  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 mg | -           |
| 2-Butoxyethanol                          | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 mg | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 100 mg          | -           |
|  | Skin - Mild irritant     | Rabbit  | -     | 500 mg          | -           |
| N-methyl-2-pyrrolidone                   | Eyes - Moderate irritant | Rabbit  | -     | 100 mg          | -           |

### **Sensitization**

There is no data available.

### **Mutagenicity**

There is no data available.

# **Carcinogenicity**

## **Classification**

| Product/ingredient name             | OSHA | IARC    | NTP |
|-------------------------------------|------|---------|-----|
| Titanium dioxide<br>2-Butoxyethanol | -    | 2B<br>3 | -   |

# **Reproductive toxicity**

There is no data available.

### **Teratogenicity**

There is no data available.

## Specific target organ toxicity (single exposure)

| Name                   | Category   | Target organs                |
|------------------------|------------|------------------------------|
| Nepheline syenite      | Category 3 | Respiratory tract irritation |
| N-methyl-2-pyrrolidone | Category 3 | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

There is no data available.

## **Aspiration hazard**

There is no data available.



|   | ological information  |
|---|---|
| Information on the likely<br>routes of exposure | : Dermal contact. Eye contact. Inhalation. Ingestion.   |
| Potential acute health effects                  | 2   |
| Eye contact                                     | : Causes serious eye irritation.  |
| Inhalation                                      | : No known significant effects or critical hazards.   |
| Skin contact                                    | : Causes skin irritation. May cause an allergic skin reaction.  |
| Ingestion                                       | : No known significant effects or critical hazards.   |
| Symptoms related to the phy                     | vsical, chemical and toxicological characteristics  |
| Eye contact                                     | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness            |
| Inhalation                                      | : No known significant effects or critical hazards.   |
| Skin contact                                    | : Adverse symptoms may include the following:<br>irritation<br>redness                                |
| Ingestion                                       | : No known significant effects or critical hazards.   |
| Delayed and immediate effect                    | ts and also chronic effects from short and long term exposure   |
| Short term exposure                             |   |
| Potential immediate<br>effects                  | : No known significant effects or critical hazards.   |
| Potential delayed effects<br>Long term exposure | : No known significant effects or critical hazards.   |
| Potential immediate effects                     | : No known significant effects or critical hazards.   |
| Potential delayed effects                       | : No known significant effects or critical hazards.   |
| Potential chronic health effe                   | ects  |
| General   | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity                                 | : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.              |
| Mutagenicity                                    | : No known significant effects or critical hazards.   |
| Teratogenicity                                  | : No known significant effects or critical hazards.   |
| <b>Developmental effects</b>                    | : No known significant effects or critical hazards.   |
| Fertility effects                               | : No known significant effects or critical hazards.   |

# Numerical measures of toxicity Acute toxicity estimates

| Acute toxicity estimates |               |
|--------------------------|---------------|
| Route                    | ATE value     |
| Oral                     | 13280.1 mg/kg |
| Dermal                   | 89422.2 mg/kg |
| Inhalation (vapors)      | 124.4 mg/L    |

# Section 12. Ecological information

# <u>Toxicity</u>

| Product/ingredient name | Result   | Species  | Exposure                         |
|-------------------------|--|--|----------------------------------|
| Benzyl alcohol          | Acute LC50 460000 µg/L Fresh water   | Fish - Pimephales promelas - Juvenile<br>(Fledgling, Hatchling, Weanling)            | 96 hours                         |
| Titanium dioxide        | Acute LC50 3 mg/L Fresh water  | Crustaceans - Ceriodaphnia dubia -<br>Neonate  | 48 hours                         |
|                         | Acute LC50 6.5 mg/L Fresh water<br>Acute LC50 >1000000 µg/L Marine water   | Daphnia - Daphnia pulex - Neonate<br>Fish - Fundulus heteroclitus                    | 48 hours<br>96 hours             |
| 2-Butoxyethanol         | Acute EC50 >1000 mg/L Fresh water<br>Acute LC50 800000 µg/L Marine water<br>Acute LC50 1250000 µg/L Marine water | Daphnia - Daphnia magna<br>Crustaceans - Crangon crangon<br>Fish - Menidia beryllina | 48 hours<br>48 hours<br>96 hours |

# Persistence and degradability

There is no data available.

# **Bioaccumulative potential**

| Product/ingredient name                     | LogPow | BCF | Potential |
|---|--------|-----|-----------|
| Benzyl alcohol                              | 0.87   | -   | low       |
| 2,2-bis(Acryloyloxymethyl)butyl<br>acrylate | 0.67   | -   | low       |
| 2-Butoxyethanol                             | 0.81   | -   | low       |
| N-methyl-2-pyrrolidone                      | -0.46  | -   | low       |

# Mobility in soil

Soil/water partition coefficient (Koc)

: 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 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 empty 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   | IMDG   | ΙΑΤΑ  |  |  |  |
|-------------------------------|---|--|--|---|--|--|--|
| UN number                     | UN3082  | UN3082   | UN3082   | UN3082  |  |  |  |
| UN proper<br>shipping name    | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer) | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer). Marine<br>pollutant (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer) | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer). Marine<br>pollutant (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer) | ENVIRONMENTALLY<br>HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (Oxirane, 2,2'-[<br>(1-methylethylidene)bis(4,<br>1-phenyleneoxymethylene)]bis-<br>, homopolymer) |  |  |  |
| Transport<br>hazard class(es) | 9   | 9  | 9  | 9   |  |  |  |
| Packing group                 | Ш   | 111  | Ш  | Ш   |  |  |  |
| Environmental<br>hazards      | No.   | Yes.   | Yes.   | Yes.  |  |  |  |

**AERG :** 171

| Additional information       |   |  |
|------------------------------|---|--|
| TDG Classification           | : | Product classified as per the following sections of the Transportation of Dangerous<br>Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).<br>Non-bulk packages of this product are not regulated as dangerous goods when<br>transported by road or rail. |
| IMDG                         | : | This product is not regulated as a dangerous good when transported in sizes of $\leq$ 5 L or $\leq$ 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.<br><b>Emergency schedules</b> F-A, S-F                          |
| ΙΑΤΑ                         | : | This product is not regulated as a dangerous good when transported in sizes of $\leq$ 5 L or $\leq$ 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 | : | <b>Transport within user's premises:</b> 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 rules: N-ethyl-2-pyrrolidone   |
|--------------------------|--|
|                          | <b>TSCA 8(a) PAIR</b> : 2-Methoxy-1-methylethyl acetate; Siloxanes and Silicones, di-Me, reaction products with silica; Octamethylcyclotetrasiloxane |
|                          | TSCA 8(a) CDR Exempt/Partial exemption: Not determined   |
|                          | United States inventory (TSCA 8b): All components are listed or exempted.  |
|                          | Clean Water Act (CWA) 307: Toluene; Ethylbenzene; Benzene  |
|                          | Clean Water Act (CWA) 311: Formaldehyde; Toluene; Ethylbenzene; Xylene; Maleic Anhydride; Benzene  |

# Section 15. Regulatory information

| Clean Air Act Section 112<br>(b) Hazardous Air<br>Pollutants (HAPs) | : Listed     |
|---|--------------|
| Clean Air Act Section 602<br>Class I Substances                     | : Not listed |
| Clean Air Act Section 602<br>Class II Substances                    | : Not listed |
| DEA List I Chemicals<br>(Precursor Chemicals)                       | : Not listed |
| DEA List II Chemicals<br>(Essential Chemicals)                      | : Not listed |

## SARA 302/304

**Composition/information on ingredients** 

|                     |   | EHS               | SARA 302 TPQ |             | SARA 304 RQ |           |
|---------------------|---|-------------------|--------------|-------------|-------------|-----------|
| Name                |   |                   | (lbs)        | (gallons)   | (lbs)       | (gallons) |
| Formaldehyde        |   | Yes.              | 500          | 73.9        | 100         | 14.8      |
| SARA 304 RQ         | : 5446623.1 lbs / 2472766.9 k   | g                 |              |             |             |           |
| <u>SARA 311/312</u> |   |                   |              |             |             |           |
| Classification      | : SKIN CORROSION/IRRITAT<br>SERIOUS EYE DAMAGE/ EY<br>SKIN SENSITIZATION - Cate<br>CARCINOGENICITY - Catego | 'E IRRI<br>gory 1 |              | Category 2A |             |           |

# **Composition/information on ingredients**

| Name                                       | Classification   |
|--|--|
| Oxirane, 2,2'-[(1-methylethylidene)bis(4,  | SKIN CORROSION/IRRITATION - Category 2   |
| 1-phenyleneoxymethylene)]bis-, homopolymer | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A   |
|  | SKIN SENSITIZATION - Category 1  |
| Nepheline syenite                          | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A   |
|  | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract                        |
|  | irritation) - Category 3   |
| Benzyl alcohol                             | ACUTE TOXICITY (oral) - Category 4   |
|  | ACUTE TOXICITY (inhalation) - Category 4   |
| Titanium dioxide                           | CARCINOGENICITY - Category 2   |
| 2,2-bis(Acryloyloxymethyl)butyl acrylate   | SKIN CORROSION/IRRITATION - Category 2   |
|  | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A   |
|  | SKIN SENSITIZATION - Category 1  |
| 2-Butoxyethanol                            | FLAMMABLE LIQUIDS - Category 4   |
|  | ACUTE TOXICITY (oral) - Category 4   |
|  | ACUTE TOXICITY (dermal) - Category 4   |
|  | ACUTE TOXICITY (inhalation) - Category 4   |
|  | SKIN CORROSION/IRRITATION - Category 2   |
| N mothyd 2 nymrolidano                     | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A   |
| N-methyl-2-pyrrolidone                     | FLAMMABLE LIQUIDS - Category 4<br>SKIN CORROSION/IRRITATION - Category 2                   |
|  | SKIN CORROSION/IRKITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A |
|  | TOXIC TO REPRODUCTION (Unborn child) - Category 1B   |
|  | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract                        |
|  | irritation) - Category 3   |
|  | initation) - Category 5  |

## **SARA 313**

|                                 | Product name    | CAS number |
|---------------------------------|-----------------|------------|
| Form R - Reporting requirements | 2-Butoxyethanol | 111-76-2   |
| Supplier notification           | 2-Butoxyethanol | 111-76-2   |

Tel : +1-888-GHS-7769 (447-7769) / +1-450-GHS-7767 (447-7767) www.kmkregservices.com www.askdrluc.com www.ghssmart.com

# Section 15. Regulatory information

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.

## **State regulations**

| Massachusetts       | : The following components are listed: Titanium dioxide; 2-Butoxyethanol; Benzyl alcohol |
|---------------------|--|
| New York            | : None of the components are listed.   |
| New Jersey          | : The following components are listed: Titanium dioxide; 2-Butoxyethanol                 |
| Pennsylvania        | : The following components are listed: Titanium dioxide; 2-Butoxyethanol; Benzyl alcohol |
| California Prop. 65 |  |

▲ WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Titanium dioxide, Carbon black, respirable powder, Formaldehyde, Crystalline silica, respirable powder, Ethylbenzene, which are known to the State of California to cause cancer, and Methanol, Toluene, N-methyl-2-pyrrolidone, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www. P65Warnings.ca.gov.

Since the carcinogenic ingredients in this compound are encapsulated, the risk of exposure by inhalation is minimum when used in accordance with the user documentation.

# Canada

**Canadian lists** 

Canadian NPRI CEPA Toxic substances Canada inventory (DSL

- : The following components are listed: 2-Butoxyethanol
- **CEPA Toxic substances** : The following components are listed: 2-Butoxyethanol
  - : All components are listed or exempted.

# NDSL)

Section 16. Other information

## Procedure used to derive the classification

| Classification                                   | Justification      |
|--|--------------------|
| SKIN CORROSION/IRRITATION - Category 2           | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method |
| SKIN SENSITIZATION - Category 1                  | Calculation method |
| CARCINOGENICITY - Category 2                     | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 3              | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 2          | Calculation method |

#### **History**

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|--------------------------|--------------------------------|
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| Version                  | : 2                            |
| Prepared by              | : KMK Regulatory Services Inc. |
|                          |                                |

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