

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CUS3116B

Synonyms: N/A Product Number: 2243-16-1

Manufacturer: RODEL, Inc. RODEL Europe GmbH

451 Bellevue Road Sonnenstrasse 26B

Diamond State Industrial Park D-85622 Feldkirchen

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1. COMPOSITION/INFORMATION ON INGREDIENTS

Note: This material has not been evaluated as a whole. Use of this product is for experimental purposes only.

Component: Aluminum Oxide

CAS Number: 1344-28-1 Percent of Mixture: <15

ACGIH TLV/TWA 10 mg/m³ Total Dust OSHA PEL 20 mppcf

Component: Proprietary Organic Acid Salt

CAS Number: Trade Secret Percent of Mixture: <10

No known exposure limits

Component: Proprietary Oxidant Complex

CAS Number: Trade Secret Percent of Mixture: <5

TLV for Iodine = 1 mg/m³ (C)

Component: Proprietary Ingredient

CAS Number: Trade Secret Percent of Mixture: < 0.1%

2. HAZARDS IDENTIFICATION

Milky white liquid. May cause eye, skin and/or respiratory irritation. May cause sensitization in susceptible individuals.

POTENTIAL HEALTH EFFECTS

EYE: Avoid contact with eyes. Contact may cause irritation, redness and pain of eye surfaces.

SKIN CONTACT: May cause moderate to severe irritation upon contact. Prolonged and/or repeated contact may cause more severe irritation and/or dermatitis. This product contains a trace ingredient that may cause skin sensitization and/or contact dermatitis in some individuals.

INGESTION: Ingestion not expected to be a significant route of exposure under anticipated conditions of use. Although this specific product formulation has not been tested as a whole, the toxicity of the individual formulation components indicates that ingestion may be harmful. Ingestion of large quantities of product may result in symptoms including nausea, vomiting and diarrhea. This may result in irritation to the mouth and stomach in addition to toxic systemic effects.

INHALATION: Inhalation is not expected to be a significant route of exposure under anticipated conditions of use. Inhalation of product mists or dried product residues may cause irritation of the mucous membranes in susceptible individuals and should be avoided. Avoid inhalation of dusts from dried product which may cause irritation of the nose and throat.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

Individuals with preexisting dermatitis or skin disorders may have increased susceptibility to irritation resulting from skin contact. Persons with existing respiratory problems such as asthma may be more susceptible to inhalation effects.

CHRONIC EFFECTS: None known.

4. FIRST-AID MEASURES

EYE: Immediately flush with copious amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with the fingers. Seek medical attention immediately.

SKIN: Remove contaminated clothing and shoes immediately. Wash affected areas with soap and flush with water for at least 15 minutes or until no evidence of chemical remains. If pain or irritation persists, seek medical attention.

INGESTION: If victim is conscious, give several glasses of water. Do not induce vomiting. Seek medical attention immediately.

INHALATION: If irritation develops, remove patient from source of exposure to fresh air. If breathing is difficult, administer oxygen. If irritation persists or worsens, seek medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not Applicable

Autoignition: Not Applicable

Flammability: Not flammable due to high water content.

Fire and Explosion Hazards: This product contains an oxidizing agent which, in pure form, may contribute to a fire. Follow good industrial fire safety practices when storing, handling, processing or otherwise using this product.

Extinguishing Media: No special extinguishing media required for this product.

Special Fire Fighting Instructions: Remove exposed containers from fire exposure if this can be accomplished safely. If containers cannot be moved, cool with water spray. Wear NIOSH/MSHA approved Self Contained Breathing Apparatus (SCBA) in accordance with the approvals, manufacturer's instructions and a respiratory protection program meeting the requirements of 29 CFR 1910.134 whenever fighting fires involving this product. Wear full encapsulation protective clothing whenever fighting fires involving this product. Do not allow fire control water runoff to enter sewers or land.

6. ACCIDENTAL RELEASE MEASURES Identify source of spill or leak. Eliminate source if this can be accomplished without risk of injury or hazardous exposure. Limit spread of spill or leak by diking. Spilled material may be collected using vacuum or absorbed onto sand, vermiculite or other suitable material.

Containerize collected material and cleanup debris for proper disposal. Avoid inhalation of dusts which may be generated when cleaning up dried residues of product spills. Prevent materials from entering sewers or waterways.

7. HANDLING AND STORAGE

Store in cool, dry area away from direct sunlight and incompatible materials. Keep from freezing. **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

EYE: Wear chemical splash goggles whenever potential splash hazard exists.

SKIN: Avoid repeated, prolonged and/or gross skin contact. In cases where skin contact is anticipated, chemical-resistant gloves and other garments such as aprons appropriate to the hazards of the specific operation should be provided.

INHALATION: Not expected to be necessary under anticipated conditions of use. Where local

exhaust ventilation is not adequate to control exposures within acceptable levels, NIOSH/MSHA approved full-face chemical cartridge air-purifying respirator with organic cartridge and dust/mist prefilter may be acceptable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION, continued...

OTHER: Provide emergency eyewash and flushing facilities wherever this product is stored, handled, processed and otherwise used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 212° F 100° C Melting Point: 32° F 0° C

Vapor Pressure (mm of Hg): As H₂O Vapor Density (Air=1): <1.0

Specific Gravity: 1.0-1.1

Solubility (H₂O): Dispersible

Evaporation Rate (Ether=1): As H₂O

pH Factor of 3.2-4.0 at a Concentration Neat

Appearance: Milky white liquid

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid (Stability): Heat may cause decomposition.

Incompatible Materials: Avoid contact with strong caustic agents, oxidizers, hydrides of alkali metals, metal sulfides and cyanides.

Hazardous Decomposition Products:

May liberate CO, CO₂, I₂, sulfur oxides and other toxic products if heated to decomposition.

Hazardous Polymerization: Will not occur.

1. TOXICOLOGICAL INFORMATION

See Section 3.

2. ECOLOGICAL INFORMATION

None available.

3. DISPOSAL CONSIDERATIONS

Identify source of spill or leak. Eliminate source if this can be accomplished without risk of injury or hazardous exposure. Limit spread of spill or leak by diking. Spilled material may be collected using wet-vacuum or absorbed onto sand, vermiculite or other suitable material. Containerize collected material

and cleanup debris for proper disposal. Avoid inhalation of dusts which may be generated when cleaning up dried residues of product spills.

Dispose in accordance with applicable federal, state and local solid and hazardous waste disposal requirements. If this product does become a waste, it does not by itself meet the criteria for hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA – 40 CFR 261, Subparts C and D).

1. TRANSPORT INFORMATION

Proper Shipping Name: **CUS3116B**

Hazard Class: Not Regulated in Transportation

Subsidiary Hazard Class: Not Applicable

United Nations Classification: N/A

Labels (DOT): none

1. REGULATORY INFORMATION

Precautionary Label (OSHA): Caution. Prevent eye and skin contact. Do not inhale vapor, mists or

dusts from dried product. Excessive inhalation, ingestion, or skin contact may cause irritation .

Read MSDS prior to use.

This product contains no listed Precursor or Essential Chemicals (12 CFR 1310)

This product contains no Class I or Class II Controlled Substances (40 CFR 82).

This product contains no ingredients designated Toxic Pollutants subject to Toxic Pollutant Effluent Standards (40 CFR 129).

All ingredients of this product are listed or otherwise offered in compliance with the Toxic Substance Control Act(TSCA) Section 8(b) Inventory.

16. OTHER INFORMATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

Rodel, Inc.