

## **SECTION 1. IDENTIFICATION**

GHS PRODUCT IDENTIFIER: Alchemco Clean & Repair - HP Concrete Repair, ISO

**OTHER MEANS OF IDENTIFICATION:** ACR HP Concrete Repair

**PRODUCT CODE:** ACR-HP02-ISO, ACR-HP10-ISO

**PRODUCT TYPE:** Concrete Repair **IDENTIFIED USES:** Concrete Repair

Alchemco, A division of MBC North America, Inc

SUPPLIER / MANUFACTURER: 3532 Mayland Court, Henrico, VA 23233

800-610-2895

EMERGENCY TELEPHONE NUMBER
WITH HOURS OF OPERATION

800-610-2895 24 hours

## SECTION 2. HAZARDS IDENTIFICATION

OSHA/MCS STATUS:

ACUTE TOXICITY: INHALATION - Category 4 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irrita-

tion] - Category 3

#### **GHS LABEL ELEMENTS**

**HAZARD PICTOGRAMS:** 





SIGNAL WORD: DANGER

Harmful if inhaled.

Causes skin and eye irritation.

HAZARD STATEMENTS: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. May cause respiratory irritation.

**PRECAUTIONARY STATEMENTS** 

Wear protective gloves. Wear eye or face protection. In case of inadequate ventilation wear respiratory protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should be removed and cleaned or disposed. May cause eye, skin, and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled, May cause allergic Skin reaction.

eye, skin, and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled. May cause allergic Skin reaction. May cause lung damage. The onset of the respiratory symptoms may be delayed for several hours after exposure. Hyper-reactive responses may develop in sensitized individuals.

RESPONSE:

PREVENTION:



SAFETY DATA SHEET



STORAGE:

**DISPOSAL:** 

HAZARDS NOT OTHERWISE CLASSIFIED (NHOC):

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL	CAS#	%
Diphenylmethane Diisocyanate	26447-40-5	30-70%
Polyurethane Prepolymer of MDI and Polyol	Proprietary	30-70%
Aromatic Hydrocarbons	68477-30-5	10-40%
Proprietary	Proprietary	0-10%

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:** Flush with clean, lukewarm water for at least 15 minutes, keeping eyelids open. Seek

medical attention.

Move to fresh air. Keep warm and at rest. Obtain immediate medical attention.

INHALATION: Treatment is symptomatic for primary irritation or bronchospasm. Administer

oxygen or artificial respiration as necessary.

Remove contaminated clothing. Wash affected area with soap and water. If symptoms develop, obtain medical attention. A polyglycol-based skin cleanser

SKIN CONTACT: symptoms develop, obtain medical attention. A polygycol-based skin cleanser or corn oil may be more effective than soap and water. Clean contaminated

clothing.

Do not induce vomiting. Call physician immediately. Never give anything by mouth

INGESTION: to an unconscious person. Wash out mouth with water provided patient is con-

scious.

### MOST IMPORTANT SYMPTOMS. EFFECTS, ACUTE AND DELAYED POTENTIAL ACUTE HEALTH EFFECTS

**EYE CONTACT:** Causes irritation

INHALATION: Harmful if inhaled. This product is a respiratory irritant and potential respirato-

ry sensitizer.

**SKIN CONTACT:** Causes skin irritation. May cause sensitization.

**INGESTION:** May cause irritation. Low oral toxicity.

MEDICAL CONDITIONS GENERALLY AGGRA- Asthma and other respiratory disorders (bronchitis, emphysema), skin allergies,

VATED BY EXPOSURE: eczema

**OVER-EXPOSURE SIGNS/SYMPTOMS** 

EYE CONTACT: Irritation, pain, watering, redness

INHALATION: Excessive inhalation of mist may affect respiratory system: Irritation, coughing,

wheezing, breathing difficulties, asthma.

SKIN CONTACT: Irritation, redness.

INGESTION: No data available.





#### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

**NOTES PHYSICIAN:** 

Provide symptomatic and supportive therapy as needed. Medical followup should be monitored for at least 48 hours following severe exposure.

SPECIFIC TREATMENTS:

**PROTECTION OF FIRST-AIDERS:** 

### SECTION 5. FIRE-FIGHTING MEASURES

#### **EXTINGUISHING MEDIA**

SUITABLE EXTINGUISHING MEDIA: Dry Chemical; Carbon Dioxide; Foam

Water may be used if no other media is available, and then in copious quantities. Reaction between water and hot isocyanate may be vigorous. Prevent

UNSUITABLE EXTINGUISHING MEDIA: titles. Reaction between water and not isocyanate may be vigorous. Prevent washings from entering water courses, keep fire exposed containers cool by

spraying with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Reacts slowly with water to produce carbon dioxide which may rupture closed

containers. This reaction accelerates at higher temperatures.

HAZARDOUS THERMAL DECOMPOSITION

PRODUCTS:

C02, carbon monoxide, oxides of nitrogen, HCN.

SPECIAL PROTECTIVE EQUIPMENT FOR Full emergency equipment with self-contained breathing apparatus and full

FIRE-FIGHTERS: protective clothing.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

PROCEDURE:

## PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area. Notify appropriate authorities if necessary. Dike or impound the spilled material and control further spillage if possible. Cover the spill with sawdust, vermiculite, Fuller's earth or other absorbent material. Pour decontamination solution over spill area and allow to react for 30 minutes. Collect material in open containers and add further decontamination solution. Mixing with wet earth is also effective, but slower. Test atmosphere for MDI. Decontamination solution: 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be

substituted for the ammonium hydroxide). Follow all manufacturer/supplier's MSDS when preparing and using solution.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, ENVIRONMENTAL PRECAUTIONS: drains and sewers. Inform the relevant authorities if the product has caused

environmental pollution (sewers, waterways, soil or air).

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

SMALL SPILL: Use absorbent materials (sand, sawdust, vermiculite) to contain and absorb

spills and scoop into a container.

LARGE SPILL: Use absorbent materials (sand, sawdust, vermiculite) to contain and absorb

spills.

### SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING





**PROTECTIVE MEASURES:** 

Always use PPE (see Section 8). Persons with history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container tightly closed. Blanket with nitrogen to assist with moisture control.

ADVICE ON GENERAL OCCUPATIONAL HYGIENE:

STORAGE TEMPERATURE: 50 def F / 100 deg F (10 deg C / 38 deg C). SHELF LIFE: 6 months at 72 deg F after receipt of material by customer. OTHER PRECAUTIONS: Storage at temperatures greater than 122 def F can result in an increase in monomeric HDI content. Store in tightly closed containers to prevent moisture contamination. Due to reaction with water, producing CO2 gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Nitrogen blanketing of material is recommended. Store indoors in well ventilated area. Do not store in containers made of copper, copper alloys, or galvanized surfaces.

CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES:

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **CONTROL PARAMETERS**

#### **OCCUPATIONAL EXPOSURE LIMITS**

Diphenylmethane 4,4'-diisocyanate

INGREDIENT NAME EXPOSURE LIMITS

ACGIH TLV (United States, 3/2012). TWA: 0.005 ppm 8 hours. OSHA PEL (United States, 6/2010). CEIL: 0.02 ppm

CEIL: 0.02 ppm CEIL: 0.2 mg/m3

**EXPOSURE CONTROLS** 

Use only with adequate ventilation. Use engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Diisocyanates can only be smelled if the occupational exposure limit has been exceeded considerably.

APPROPRIATE ENGINEERING CONTROLS:

Medical supervision of all employees who handle or come in contact with respiratory sensitizers is recommended. Personnel with a history of asthma-type conditions, bronchitis or skin sensitization conditions should not work with MDI based products. The Occupational Exposure Limits listed do not apply to previously sensitized individuals. Sensitized individuals should be removed from any further exposure.

PREVENTIVE MEASURES: Conditions of use, actual exposures, and engineering controls will dictate the need for specific protection at your site.

INDIVIDUAL PROTECTION MEASURES PREVENTATIVE AND HYGIENE MEASURES:

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety showers and eyewash stations should be available

WORK HYGIENIC PRACTICES: Educate and train all employees in the safe use of product.





EYE PROTECTION: Safety glasses, goggles or face shield

SKIN PROTECTION: Butyl rubber, nitrite rubber, neoprene gloves. Thin latex gloves should be avoided for repeated for long term use. Cover as much exposed skin as possible. Tyvek (or like) suit with headcover is recommended for

INDIVIDUAL PROTECTION MEASURES EYE/FACE/RESPIRATORY PROTECTION:

**ENVIRONMENTAL EXPOSURE CONTROLS:** 

RESPIRATORY PROTECTION: Always use with adequate ventilation to avoid exceeding exposure limits. If spraying product, refer to OSHA guidelines for spraying isocyanates. A respirator that is recommended or approved for use in isocyanate-containing environments is necessary for spray applications.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legisla-

tion, REFER TO SECTION 6 FOR ADDITIONAL INFORMATION

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Brownish liquid

PHYSICAL STATE: Liquid

**ODOR:** Musty

ODOR THRESHOLD: NA

PH: NA

MELTING POINT: NA

FREEZING POINT: -74°F, -59°C BOILING POINT: 410°F, 210°C

FLASH POINT: F: >100, C: >108 METHOD USED: Closed Cup

**EVAPORATION RATE: NA** FLAMMABILITY (SOLID, GAS): NA LOWER AND UPPER EXPLOSIVE: NA

**VAPOR PRESSURE:** <1.0 x 10-5 @ 20°C

VAPOR DENSITY: NA

**DENSITY** ( $H^2O = 1$ ): 1.09 @ 77°F

**SOLUBILITY:** Insoluble

PARTITION COEFFICIENT N-OCTANOL/WATER:

NA

AUTO-IGNITION TEMPERATURE: F: >1100, C: >600

DECOMPOSITION TEMPERATURE: NA

**VISCOSITY:** 24 cps @ 77°F (25°C)

PERCENT SOLIDS BY WEIGHT: 100

VOLATILE ORGANIC COMPOUNDS (VOC): NA

## SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY:** No specific data available. CHEMICAL STABILITY: Stable at room temperature.



POSSIBILITY OF HAZARDOUS REACTIONS:



Reaction with water (moisture) produces CO2-gas. Exothermic reaction with

materials containing active hydrogen groups. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid

water-insoluble layer of polyurea is formed at the interface by liberating carbon

dioxide gas.

**CONDITIONS TO AVOID:** Avoid high temperatures.

INCOMPATIBLE MATERIALS: Water, amines, alkalies, acids, alcohols

HAZARDOUS DECOMPOSITION

PRODUCTS: CO2 , CO, Nitrous Oxide, HCN and other aromatic fragments

HAZARDOUS POLYMERIZATION: May occur; Contact with moisture or other materials which react with isocya-

nates or temperatures above 400 °F

## SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS ACUTE TOXICITY

#### **IRRITATION/CORROSION:**

EYE EFFECTS: Irritant SKIN EFFECTS: Irritant

SENSITIZATION:

# CARCINOGENICITY CLASSIFICATION

PRODUCT/INGREDIENT NAME	OSHA	IARC	NTP	ACGIH	EPA	NIOSH

SPECIFIC TARGET ORGAN TOXICITY (SINGLE

**EXPOSURE):** 

SPECIFIC TARGET ORGAN TOXICITY (REPEAT-

**ED EXPOSURE):** 

**ASPIRATION HAZARD:** 

#### **POTENTIAL ACUTE HEALTH EFFECTS**

**EYE CONTACT:** 

**INHALATION:** 

**SKIN CONTACT:** 

**INGESTION:** 

#### SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

**EYE CONTACT:** 

INHALATION:

SKIN CONTACT:

INGESTION:

# DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONGER TERM EXPOSURE SHORT TERM EXPOSURE

**POTENTIAL IMMEDIATE EFFECTS:** 

**POTENTIAL DELAYED EFFECTS:** 







#### **LONG TERM EXPOSURE**

**POTENTIAL IMMEDIATE EFFECTS:** 

**POTENTIAL DELAYED EFFECTS:** 

**POTENTIAL CHRONIC HEALTH EFFECTS** 

**GENERAL:** 

**CARCINOGENICITY:** 

MUTAGENICITY:

TERATOGENICITY:

**DEVELOPMENTAL EFFECTS:** 

**FERTILITY EFFECTS:** 

#### **NUMERICAL MEASURES OF TOXICITY**

#### **ACUTE TOXICITY ESTIMATES**

ROUTE	ATE VALUE		
	Greater than 10000 mg/kg (rats) Greater than 5000 mg/kg (rabbits) .49 mg/l, 4 h (rats)		

Conclusion: Irritating to respiratory system.

## **SECTION 12. ECOLOGICAL INFORMATION**

MOBILITY IN SOIL:

PERSISTANCE DEGRADABILITY: Diphenylmethane 4, 4'-diisocyanate – Not biodegradable

By considering the production and use of the substance, it is unlikely that significant environmental exposure in the air or water will arise. Immiscible with water, but will react with water to produce inert and non-biodegradable solids. Conversion to soluble products, including diamino- diphenylmethane (MDA), is very low under the optimal laboratory conditions of good dispersion and low concentration. In air, the predominant degradation process is predicted to be

a relatively rapid OH radical attack, by calculation and by analogy with related disocyanates.

BOD5 Not determined.

OTHER ECOLOGICAL INFORMATION: COD Not determined.

TOC Not determined.

## SECTION 13. DISPOSAL CONSIDERATIONS

Waste should be minimized as much as possible. . Avoid contact of waste with soil, waterways, drains and sewers. Dispose of surplus product via a licensed

DISPOSAL METHODS: waste disposal contractor. Waste must be disposed of in accordance with federal state and local environmental control regulations. Incineration is the

preferred method.

## SECTION 14. TRANSPORTATION INFORMATION

	US DOT (Domestic Surface)	CANADIAN TDG	ICAO/IATA Air Transportation	IMO/IMDG Water Transportation
Proper Shipping Name	Not Regulated.	Not Regulated.	Not Regulated.	Not Regulated.





When in individual containers of less than the 5,000 lbs (2270 kg), this material

ships as non-regulated.

[If >5,000 lbs, this product ships as follows: PROPER SHIPPING NAME: Other SPECIAL PRECAUTIONS FOR USER:

Regulated Substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate); HAZ-ARD CLASS - 9; UN NUMBER: None (NA NUMBER - NA 3082); PACKING GROUP

III; DOT PRODUCT RQ - 5,000 lbs (2270 kg)]

## SECTION 15. REGULATORY INFORMATION

#### **FEDERAL REGULATIONS**

OSHA Hazard Communication Standard (29 CFR 1910.1200): HCS Classification: **U.S. FEDERAL REGULATIONS:** 

Toxic, Irritating material; Sensitizing material.

TSCA (TOXIC SUBSTANCE CONTROL ACT): All Components are listed or exempted.

**CERCLA (COMPREHENSIVE RESPONSE** 

Reportable quantity 20,000 lbs. COMPENSATION, AND LIABILITY ACT):

**RCRA STATUS:** 

SARA 311/312 HAZARD CATEGORIES: Immediate (Acute) Health Hazard.

SARA 313 TOXIC CHEMICALS: Diisocyanate Compounds (Category Code N120) 35-60%.

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**

WARNING: This product contains less than 0.1% of a chemical known to the CALIFORNIA PROP. 65

State of California to cause cancer.

**CANADIAN REGULATIONS** 

CEPA DSL: At least one component is not listed.

WHMIS Class D-2A: Material causing other toxic effects (Very toxic). WHMIS CLASSES:

WHMIS Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

## **SECTION 16. OTHER INFORMATION**

#### **HMIS HAZARD CLASSIFICATION**

HEALTH: 2

FLAMMABILITY: 1 HMIS HAZARD CLASSIFICATION:

**REACTIVITY: 1** 

PROTECTION: (the customer is responsible for determining the PPE code for this product.)

HEALTH: 2

FLAMMABILITY: 1 NATIONAL FIRE PROTECTION ASSOCIATION:

> (USA) **INSTABILITY: 1**

SPECIAL:

**HISTORY** 

DATE OF ISSUE MM/DD/YYYY: 02/6/19

VERSION: 1

PREPARED BY:





ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labeling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

**KEY ABBREVIATIONS:** IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From

Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

**UN = United Nations** 





## **SECTION 1. IDENTIFICATION**

GHS PRODUCT IDENTIFIER: Alchemco Clean & Repair HP Concrete Repair-RESIN

**OTHER MEANS OF IDENTIFICATION:** ACR HP Concrete Repair- RESIN

PRODUCT CODE: ACR-HP02-RES, ACR-HP10-RES

**PRODUCT TYPE:** Concrete Repair **IDENTIFIED USES:** Concrete Repair

Alchemco, A division of MBC North America, Inc

SUPPLIER / MANUFACTURER: 3532 Mayland Court, Henrico, VA 23233

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EMERGENCY TELEPHONE NUMBER WITH HOURS OF OPERATION

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## SECTION 2. HAZARDS IDENTIFICATION

**OSHA/MCS STATUS:** 

CLASSIFICATION OF THE SUBSTANCE OR

**GHS LABEL ELEMENTS** 

HAZARD PICTOGRAMS:





SIGNAL WORD: CAUTION

May Cause Eye Irritation. May Cause Skin Irritation. May be harmful if swallowed.

HAZARD STATEMENTS: May be fatal if swallowed and enters airways.

Repeated or prolonged exposure may irritate the respiratory system. The product is combustible and toxic vapors may be given off in a fire.

**PRECAUTIONARY STATEMENTS** 

Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling. If on skin: Wash with plenty of soap and water. Contaminated work clothing should be removed and cleaned or disposed. If skin irritation

**PREVENTION:** work clothing should be removed and cleaned or disposed. If skin irritation occurs, get medical attention. If in eyes: Rinse with water for several minutes.

Get medical attention.

**RESPONSE:** 

STORAGE:

**DISPOSAL:** 

HAZARDS NOT OTHERWISE CLASSIFIED

(NHOC):



SAFETY DATA SHEET



## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL	CAS#	%
Polyether Polyol	25723-16-4	30-50%
Polyester Polyol	Proprietary	30-50%
Aromatic Hydrocarbons	68477-30-5	10-40%
Pigment	Proprietary	5-10%
Proprietary		0-10%

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:** Flush immediately with plenty of water for at least 15 minutes. Contact a physician.

INHALATION: Remove victim to fresh air.

REMOVE FROM SKIN IMMEDIATELY. Take off all contaminated clothing. Wash

SKIN CONTACT: exposed areas with lots of soap and water. Contact a physician if irritation

develops.

Do not induce vomiting. Wash out mouth with water. Never give anything by

mouth to an unconscious person. Call a physician immediately.

#### MOST IMPORTANT SYMPTOMS. EFFECTS, ACUTE AND DELAYED POTENTIAL ACUTE HEALTH EFFECTS

**EYE CONTACT:** May cause irritation.

May cause irritation. If breathing is difficult, give oxygen. If not breathing, give INHALATION:

artificial respiration. Get medical attention if irritation develops.

**SKIN CONTACT:** Contact may cause irritation and discomfort.

INGESTION: No data available.

MEDICAL CONDITIONS GENERALLY

No evidence of aggravation of existing medical conditions. AGGRAVATED BY EXPOSURE:

### **OVER-EXPOSURE SIGNS/SYMPTOMS**

**EYE CONTACT:** Irritation.

**INHALATION:** No data available. SKIN CONTACT: Irritation, redness. **INGESTION:** No data available.

### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

**NOTES PHYSICIAN:** No additional information. SPECIFIC TREATMENTS: No additional information. PROTECTION OF FIRST-AIDERS: No additional information.

### SECTION 5. FIRE-FIGHTING MEASURES

### **EXTINGUISHING MEDIA**

SUITABLE EXTINGUISHING MEDIA: Water spray, dry chemical or carbon dioxide





UNSUITABLE EXTINGUISHING MEDIA: None known.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Cool containers / tanks with water spray.

HAZARDOUS THERMAL DECOMPOSITION

PRODUCTS:

Ammonia, Co, Co2, nitrogen oxides.

SPECIAL PROTECTIVE EQUIPMENT/ **INSTRUCTION FOR FIRE-FIGHTERS:** 

Do not use a solid water stream. Full emergency equipment with self-contained breathing apparatus and full protective clothing. The product is com-

bustible and toxic vapors may be given off in a fire.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Evacuate nonessential personnel. Dike or impound the spilled material and control PROCEDURE:

further spillage if possible. Cover the spill with sawdust, vermiculite, Fuller's earth or

other absorbent material.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, **ENVIRONMENTAL PRECAUTIONS:** 

drains and sewers. Inform the relevant authorities if the product has caused

environmental pollution (sewers, waterways, soil or air).

#### METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Use absorbent materials (sand, sawdust, vermiculite) to contain and absorb **SMALL SPILL:** 

spills and scoop into a container.

Use absorbent materials (sand, sawdust, vermiculite) to contain and absorb **LARGE SPILL:** 

spills.

## SECTION 7. HANDLING AND STORAGE

#### PRECAUTIONS FOR SAFE HANDLING

Always use PPE (see Section 8). Use only in well ventilated areas. Keep contain-**PROTECTIVE MEASURES:** 

ers tightly closed in a cool place away from heat and sources of ignition.

ADVICE ON GENERAL OCCUPATIONAL HYGIENE:

STORAGE TEMPERATURE: 60 deg F / 100 deg F (16 deg C / 38 deg C)

SHELF LIFE: 6 months at 72 deg F after receipt of material by customer

**CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES:** 

OTHER PRECAUTIONS: Store indoors in well ventilated area. Store in original labeled container protected from direct sunlight. Eye wash and safety shower should be available nearby when this material is handled or used. Avoid envi-

ronmental contamination.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**CONTROL PARAMETERS** 

**OCCUPATIONAL EXPOSURE LIMITS** 

INGREDIENT NAME

**EXPOSURE LIMITS** 

**EXPOSURE CONTROLS** 

APPROPRIATE ENGINEERING CONTROLS:

Use only with adequate ventilation. Local exhaust ventilation is recommended if generating vapor or mist. Use engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.





PREVENTIVE MEASURES: Conditions of use, actual exposures, and engineering

controls will dictate the need for specific protection at your site.

INDIVIDUAL PROTECTION MEASURES PREVENTATIVE AND HYGIENE MEASURES:

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety showers and eyewash

stations should be available.

WORK HYGIENIC PRACTICES: Educate and train all employees in the safe use of

product.

EYE PROTECTION: Safety glasses, goggles or face shield.

INDIVIDUAL PROTECTION MEASURES EYE/FACE/RESPIRATORY PROTECTION:

SKIN PROTECTION: Butyl rubber, nitrite rubber, neoprene gloves. Thin latex gloves should be avoided for repeated for long term use. Cover as much exposed skin as possible. Tyvek (or like) suit with headcover is recommended for

spray applications.

RESPIRATORY PROTECTION: Always use with adequate ventilation. Use ap-

proved respirator.

Emissions from ventilation or work process equipment should be checked to **ENVIRONMENTAL EXPOSURE CONTROLS:** 

ensure they comply with the requirements of environmental protection legisla-

tion. REFER TO SECTION 6 FOR ADDITIONAL INFORMATION.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Colored liquid

PHYSICAL STATE: Liquid

**ODOR:** Slight Amine

ODOR THRESHOLD: NA

PH: NA

MELTING POINT: NA FREEZING POINT: NA

BOILING POINT: >482°F, >250°C

FLASH POINT: F: >350, C: >177

**EVAPORATION RATE: NA** 

FLAMMABILITY (SOLID, GAS): NA

LOWER AND UPPER EXPLOSIVE: NA

VAPOR PRESSURE: <1@ 68°F, 20°C

VAPOR DENSITY: >1

DENSITY (H<sup>2</sup>O = 1): .997 @ 77°F

SOLUBILITY: NA

PARTITION COEFFICIENT NA

N-OCTANOL/WATER:

**AUTO-IGNITION TEMPERATURE: NA** 

**DECOMPOSITION TEMPERATURE: NA** 

VISCOSITY: 99 cps @ 77°F (25°C)

PERCENT SOLIDS BY WEIGHT: 100

VOLATILE ORGANIC COMPOUNDS (VOC): NA

## SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY:** No specific data available.







CHEMICAL STABILITY: Stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Under normal conditions of storage and use, hazardous reactions will not

occur.

**CONDITIONS TO AVOID:** Avoid high temperatures.

**INCOMPATIBLE MATERIALS:** Acids, Oxidizing and reducing agents.

HAZARDOUS DECOMPOSITION Under normal conditions of storage and use, hazardous decomposition prod-

**PRODUCTS**: ucts should not be produces.

HAZARDOUS POLYMERIZATION: Will not occur.

## SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS
TOXICITY DATA FOR POLYETHER POLYOL
ACUTE TOXICITY

#### **IRRITATION/CORROSION:**

EYE EFFECTS: Irritating to eyes.

SKIN EFFECTS: Irritating to skin.

SENSITIZATION: Not sensitizing.

#### **CARCINOGENICITY**

#### CLASSIFICATION

PRODUCT/INGREDIENT NAME	OSHA	IARC	NTP	ACGIH	EPA	NIOSH

SPECIFIC TARGET ORGAN TOXICITY (SINGLE

**EXPOSURE):** 

SPECIFIC TARGET ORGAN TOXICITY (REPEAT-

ED EXPOSURE):

**ASPIRATION HAZARD:** 

**POTENTIAL ACUTE HEALTH EFFECTS** 

**EYE CONTACT:** 

**INHALATION:** 

**SKIN CONTACT:** 

INGESTION:

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

**EYE CONTACT:** 

**INHALATION:** 

SKIN CONTACT:

INGESTION:

DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONGER TERM EXPOSURE

**SHORT TERM EXPOSURE** 

**POTENTIAL IMMEDIATE EFFECTS:** 

**POTENTIAL DELAYED EFFECTS:** 

#### **LONG TERM EXPOSURE**





**POTENTIAL IMMEDIATE EFFECTS:** 

**POTENTIAL DELAYED EFFECTS:** 

POTENTIAL CHRONIC HEALTH EFFECTS

**GENERAL:** 

**CARCINOGENICITY:** 

**MUTAGENICITY:** 

**TERATOGENICITY:** 

**DEVELOPMENTAL EFFECTS:** 

**FERTILITY EFFECTS:** 

#### NUMERICAL MEASURES OF TOXICITY

#### **ACUTE TOXICITY ESTIMATES**

ROUTE	ATE VALUE	
Oral LD 50	> 2500 mg/kg (rats)	
Dermal LD 50	> 2000 mg/kg (rats)	
Inhalation LC 50		

Conclusion: Irritating to respiratory system.

### SECTION 12. ECOLOGICAL INFORMATION

**TOXICITY** No information available.

PERSISTANCE DEGRADABILITY: No information available.

MOBILITY IN SOIL: No information available.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Can be incinerated when in compliance with local regulations. Waste should be

minimized as much as possible. . Avoid contact of waste with soil, waterways,

DISPOSAL METHODS: drains and sewers. Dispose of surplus product via a licensed waste disposal contractor. Waste must be disposed of in accordance with federal state and

local environmental control regulations. Incineration is the preferred method.

## **SECTION 14. TRANSPORTATION INFORMATION**

	US DOT (Domestic Surface)	CANADIAN TDG	ICAO/IATA Air Transportation	IMO/IMDG Water Transportation
Proper Shipping Name	Not Regulated.	Not Regulated.	Not Regulated.	Not Regulated.

## **SECTION 15. REGULATORY INFORMATION**

**RCRA STATUS:** 

#### **FEDERAL REGULATIONS**

**U.S. FEDERAL REGULATIONS:** 

TSCA (TOXIC SUBSTANCE CONTROL ACT): Listed.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): None.

WIPENSATION, AND LIABILITY ACT):

SARA 311/312 HAZARD CATEGORIES: None.







#### SARA 313 TOXIC CHEMICALS: None.

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**

To the best of our knowledge, this product contains no levels of listed substanc-

CALIFORNIA PROP. 65 es, which the state of California has found to cause cancer, birth defects or

other reproductive effects.

**CANADIAN REGULATIONS** 

**CEPA DSL**: All components are listed or exempted.

WHMIS CLASSES: Not controlled under WHMIS.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

### SECTION 16. OTHER INFORMATION

#### **HMIS HAZARD CLASSIFICATION**

HEALTH: 2

HMIS HAZARD CLASSIFICATION: FLAMMABILITY: 1

REACTIVITY: 0

PROTECTION:

HEALTH: 2

NATIONAL FIRE PROTECTION ASSOCIATION: FLAMMABILITY: 1

(USA) INSTABILITY: 0

SPECIAL:

**HISTORY** 

DATE OF ISSUE MM/DD/YYYY: 02/6/19

VERSION: 1

PREPARED BY:

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labeling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

**KEY ABBREVIATIONS:** IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From

Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

