

SECTION 1. IDENTIFICATION

GHS PRODUCT IDENTIFIER: Alchemco ChoiceCote PolyCote Coating - ISO

OTHER MEANS OF IDENTIFICATION: PolyCote Coating

CC-PCH212

PRODUCT CODE: CC-PCH010

CC-PCH100

PRODUCT TYPE: Rollable Polyurea Coating **IDENTIFIED USES:** Rollable Polyurea Coating

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

GHS LABEL ELEMENTS

Acute Toxicity: Inhalation - Category 4

Respiratory Sensitization - Category 1

CLASSIFICATION OF THE SUBSTANCE/MIXTURE: Skin Sensitization - Category 1

Specific Target Organ Toxicity (Single Exposure) [Respiratory System] - Category 3

Specific Target Organ Toxicity (Repeated Exposure) [Lung] - Category 2

HAZARD PICTOGRAMS:





SIGNAL WORD: DANGER

May cause an allergic skin reaction.

Harmful if inhaled.

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

May cause respiratory irritation.

May cause damage to lungs through prolonged or repeated exposure if inhaled. 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 slopped or disposed.

PRECAUTIONARY STATEMENTS: nated 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. May cause lung damage. Hyper-reactive responses may develop in sensitized individuals.

OTHER HAZARDS: Not Available





SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS #	% WT
Homopolymer of HDI	28182-81-2	30-85%
Proprietary	Proprietary	5-45%
VOC exempt solvent	Proprietary	10-40%
Hexamethylene diisocyanate	822-06-0	<0.2%

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

Flush with clean, lukewarm water (low pressure) for at least 15 minutes while

EYE CONTACT: lifting eyelids. Refer individual to physician or ophthalmologist for immediate

follow-up.

Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Asthmatic-type symptoms **INHALATION:**

may develop and may be immediate or delayed up to several hours. Treatment

is essentially symptomatic. Consult physician.

Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse.

SKIN CONTACT: For sever exposrues, get under safety shower after removing clothing, then

get medical attention. For lesser exposures, seek medical attention if irritation

develops or persists.

DO NOT INDUCE VOMITING. Give 1 to 2 cups of milk or water to drink. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

INGESTION: Consult physician. Should vomiting occur keep patient's head lower than hip

level to prevent aspiration.

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

EYE CONTACT: Causes irritation.

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

respiratory sensitizer.

SKIN CONTACT: Causes skin irritation. May cause sensitization.

INGESTION: May cause irritation. Low oral toxicity.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Asthma and other respiratory disorders (bronchitis, emphysema), skin allergies, CHRONIC:

eczema

OVER-EXPOSURE SIGNS/SYMPTOMS

EYE CONTACT: No data available. INHALATION: No data available. SKIN CONTACT: No data available. INGESTION: No data available.

DELAYED EFFECTS FROM LONG TERM EXPOSURE: No data available







INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY **NOTES TO PHYSICIANS OR FIRST AID RESPONDERS:**

Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid

EYE CONTACT: preparation frequently. Workplace vapors could produce reversible corneal

epithelial edema impairing vision.

This product is a known pulmonary sensitizer. Treatment is essentially symp-**INHALATION:**

tomatic. An individual having a dermal or pulmonary sensitization. Reaction to

this material must be removed from any further exposure to any isocyanate. This product is a known skin sensitizer. Treat symptomatically as for contact

SKIN CONTACT: dermatitis or thermal burn.

Treat symptomatically. There is no specific antidote. Inducing vomiting is con-INGESTION:

traindicated because of the irritation nature of the product.

SECTION 5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

FLAMMABLE LIMITS IN AIR (% BY VOLUME): Upper: N/E Lower: N/E

FLASH POINT: F:239 C:115

SUITABLE EXTINGUISHING MEDIA: Dry Chemical; Carbon Dioxide; Foam; Water Spray for large fires

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 washings from entering water courses, keep fire exposed containers cool by

spraying with water.

SPECIFIC HAZARDS ARISING FROM THE

UNSUITABLE EXTINGUISHING MEDIA:

CHEMICAL:

None known.

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:

CO², Carbon Monoxide, oxides of nitrogen, Hydrogen cyanide, Isocyanate,

Isocyanic Acid

SPECIAL PROTECTIVE ACTIONS FOR

FIRE-FIGHTERS:

Full emergency equipment with self-contained breathing apparatus and full protective clothing. During a fire, HDI vapors and other irritating, highly toxic gases ma be generated by thermal decomposition or combustion (See Section 3) Closed container may explode when exposed to extreme heat or burst when

contaminated with water (CO² evolved).

FIRE-FIGHTERS:

SPECIAL PROTECTIVE EQUIPMENT FOR Full protective equipment including self-contained breathing apparatus should be used.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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.

FOR NON-EMERGENCY PERSONNEL:

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 and scoop into a container.

REFERENCE TO OTHER SECTIONS: Refer to section 8 for PPE.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: tj

Always use PPE (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic 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.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Storage Temperature: 30 ° F / 105 ° F (-1 ° C / 41 ° C)

Shelf Life: 6 months at 72 ° F after receipt of material by customer.

Storage at high temperatures 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. Ideal storage

OTHER PRECAUTIONS:

material is recommended. Store indoors in well ventilated area. Ideal storage temperature range for ease of handling is 50 °F to 81 °F (10 °C to 27 °C). Avoid contact with skin and eyes. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communica-

tion Standard.

SPECIFIC END USES:

Polyurea Hardener (intended to be mixed with other component of product to

form Polyurea).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Occupational exposure limits

Ingredient name	Exposure Limits	
Homopolymer of HDI (28182-818-2	TWA: 0.5 mg/m3 STEL: 1.0 mg/m2 (15 min)	
Hexamethylene Diisocyanate (HDI) (822-06-0	ACGIH TLV TWA: 0.005 ppm NIOSH CEIL: 0.02 ppm (10 min)	







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 HDI based products. The Occupational Exposure Limits listed do not apply to previously sensitized individuals. Sensitized individuals should be removed from any further exposure.

INDIVIDUAL PROTECTION MEASURES

PREVENTIVE MEASURES:

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

EYE PROTECTION: Safety glasses, goggles or face shield.

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

EYE/FACE/RESPIRATORY PROTECTION:

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.

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 the product.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. REFER TO SECTION 6 FOR ADDITIONAL INFORMATION

Good industrial hygiene practice dictates that when isocyanate-based coatings are spray applied, some form of respiratory protection should be worn. During the spray application of coatings containing this product, the use of a supplied-air (either positive pressure or continuous flow-type) respirator is mandatory when ONE OR MORE of the following conditions apply:

- **SPRAY APPLICATION:** The airborne isocyanate concentrations are not known.
 - The airborne isocyanate monomer concentrations exceed 0.05 ppm averaged over 8 hours or 10mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits).
 - Operations are performed in a confined space (See OSHA Confined Space Standard, 29 CFR 1910.146).





A properly fitted air-purifying (combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate-containing spray paint environments, and used in accordance with all recommendations made by the manufacturer, can be used when ALL of the following conditions are met:

• The airborne isocyanate monomer concentrations are known to be below 0.05 ppm averaged over 8 hours (10 times the 8 hour TWA exposure limit).

SPRAY APPLICATION (CONTINUED):

- The airborne polyisocyanate (polymeric, oligomeric) concentrations are known to be below 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits)
- A NIOSH-certified End of Service Life indicator or a change schedule based upon objective information or data is used to ensure that cartridges are replaced before the end of their service life. In addition, prefilters should be changed whenever breathing resistance increases due to particulate buildup.

During non-spray operations such as mixing, batch-making, brush, or roller application etc., at elevated temperatures (for example, heating of material or application to a got substrate), it is possible to be exposed to airborne isocyanate vapors. Therefore, when the coatings system will be applied in a non-spray manner, a supplied-air (either positive pressure or continuous flow-type)respirator is mandatory when ONE OR MORE of the following conditions apply:

- The airborne isocyanate concentrations are not known.
- The airborne isocyanate monomer concentrations exceed 0.05 ppm averaged over 8 hours (10 times the 8 hour TWA exposure limit).
- The airborne polyisocyanate (polymeric oligomeric) concentrations exceed 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits).
- Operations are performed in a confined space (See OSHA Confined Space Standard, 20 CFR 1910.146).

A properly fitted air-purifying (Combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate-containing spray paint environments, and used in accordance with all recommendations made by the manufacturer can be used when ALL of the following conditions are met:

NON-SPRAY APPLICATION:

- The airborne isocyanate monomer concentrations are known to be below 0.05 ppm averaged over 8 hours (10 times the 8 hour TWA exposure limit).
- The airborne polyisocyanate (polymeric, oligomeric) concentrations are known to be below 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits).
- A NIOSH-certified End of Service Life Indicator or change schedule based upon objective information or data is used to ensure that cartridges are replaced before the end of their service life. In addition, prefilters should be changed whenever breathing resistance increases due to particulate buildup.

Medical Surveillance: Medical supervision of all employees who handle or come in contact with this product is recommended. This should include pre-employment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum). Persons with asthma-type conditions, chronic bronchitis, other chronic respiratory diseases, recurrent skin eczema, or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted.

Additional Protective Measures: Safety showers and eyewash stations should be available. Educate and train employees in safe use of product. Follow all label instructions.





SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Clear/Pale Yellow

PHYSICAL STATE: Liquid

ODOR: Slight

ODOR THRESHOLD: NA

H: NA

MELTING POINT: NA

BOILING POINT: NA (decomposes)

FLASH POINT: F: 239° C: 115°

EVAPORATION RATE: NA

FLAMMABILITY (SOLID, GAS): NA

LOWER AND UPPER EXPLOSIVE: NA

VAPOR PRESSURE: NA

VAPOR DENSITY: NA

SPECIFIC GRAVITY (H2O=1): 1.05 @ 68°F (20°C)

SOLUBILITY: Insoluble, reacts slowly with water to liberate CO2 gas

PARTITION COEFFICIENT

N-OCTANOL/WATER: INA

AUTO-IGNITION TEMPERATURE: NA

DECOMPOSITION TEMPERATURE: NA

VISCOSITY: 15 cps @ 725°F

PERCENT SOLIDS BY WEIGHT: 75

VOLATILE ORGANIC COMPOUNDS (VOC)

BY VOLUME: Negligible

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY: No specific data available.

CHEMICAL STABILITY: Stable at room temperature.

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

materials containing active hydrogen groups. HDI is insoluble with, and heavier

POSSIBILITY OF HAZARDOUS REACTIONS: 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. Avoid contact with water/moisture.

INCOMPATIBLE MATERIALS: Water, amines, alkalies, alcohols, copper alloys

HAZARDOUS DECOMPOSITION CO2, carbon monoxide oxides of nitrogen, hydrogen cyanide, Isocyanate, Isocy-

PRODUCTS: anic Acid.

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

nates or temperatures above 350°F (177°C)





SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Toxicity Data for Aspartic Ester

ORAL LD50: >2500 mg/kg (Rat)

INHALATION LC50: .39 - .543 mg/l, 4h (Rat)

DERMAL LD50: >2000 mg/kg (Rabbit)

SKIN IRRITATION: Slightly Irritating. EYE IRRITATION: Slightly irritating.

SENSITIZATION: Dermal: sensitizer (guinea pig, maximization test)

Inhalation: sensitizer

REPEATED DOSE TOXICITY: 90 days, inhalation NOAEL: 3.3mg/m3 (Rat)

Irritation to lungs and nasal cavity

MUTAGENICITY: Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

SECTION 12. ECOLOGICAL INFORMATION

Data for HDI Homopolymer materials except where indicated:

PERSISTENCE AND DEGRADABILITY: Aerobic, 1% exposure time: 28 days — Not readily biodegradable

By considering the production and use of the substance, it is unlikely that sig-

MOBILITY IN SOIL: nificant environmental exposure in the air or water will arise. Immiscible with

water, but will react with water to produce inert and non-biodegradable solids.

BOD5: Not determined.

Other ecological information: COD: Not determined.

TOC: Not determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste should be minimized whenever 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.

Empty containers retain product residue (liquid and/or vapor) and can be dan-

gerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

PRECAUTIONS: containers to heat, flame, sparks, static electricity, or other sources of ignition.

All containers should be disposed of in an environmentally safe manner and in

An containers should be disposed of inflations

accordance with governmental regulations.

SECTION 14. TRANSPORTATION INFORMATION

U.S. DOT (Domestic Surface)

PROPER SHIPPING NAME: Not regulated

CANADIAN TDG

PROPER SHIPPING NAME: Not regulated

ICAO/IATA (Air Transportation)

PROPER SHIPPING NAME: Not Regulated

IMO/IMDG (Water Transportation)

PROPER SHIPPING NAME: Not Regulated







SECTION 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200):

Hazardous

TSCA (TOVIC SUBSTANCE CONTROL ACT)

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

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

Vone

SARA TITLE III (SUPERFUND AMENDMENTS

AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: Acute Health Hazard, Chronic Health Hazard

313 REPORTABLE INGREDIENTS: NO

NONE

RCRA STATUS:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing or derived from the product be applicable for state requirements. For details on your regulatory requirements

you should contact the appropriate agency in your state.

STATE REGULATIONS

CALIFORNIA PROP. 65

To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects, or other reproductive effects.

New Jersey, or Pennsylvania Right to Know Substance List:

Material	CAS#	%
Homopolymer of HDI	28182-81-2	30-85%
Hexamethylene Diisocy- anate (HDI)	822-06-0	<0.2%

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

OTHER U.S. STATE INVENTORIES:

Material	CAS#	%
Hexamethylene Diisocy- anate (HDI)	822-06-0	<0.2%

Massachusetts Substance List (MSL): Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. To the best of our knowledge this product contains no substances at a level which could require reporting under the statute.

CEPA DSL

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

CANADIAN REGULATIONS:

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

NFPA HAZARD CLASSIFICATION: FLAMMABILITY: 1

REACTIVITY: 1

HEALTH: 2

HMIS HAZARD CLASSIFICATION: FLAMMABILITY: 1

REACTIVITY: 1

HISTORY

DATE OF ISSUE MM/DD/YYYY: 08/27/2019

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 ChoiceCote PolyCote Coating - RESIN

OTHER MEANS OF IDENTIFICATION: PolyCote Coating

CC-PC002

PRODUCT CODE: CC-PC010

CC-PC100

PRODUCT TYPE: Rollable Polyurea Coating **IDENTIFIED USES:** Rollable Polyurea Coating

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

GHS LABEL ELEMENTS

HAZARD PICTOGRAMS:

PRECAUTIONARY STATEMENTS:



SIGNAL WORD: DANGER

May Cause Eye Irritation

HAZARD STATEMENTS: May Cause Skin Irritation
May be Harmful if Inhaled

May be Harmful if Swallowed

Wear protective gloves. 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 occurs, get medical attention. If in

eyes: Rinse with water for several minutes. Get medical attention.

OTHER HAZARDS: Not Available

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS #	% WT
Aspartic Esters (Blend)	Proprietary	42-98
Proprietary		0-45

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

Flush immediately with plenty of water for at least 15 minutes. Contact a physi-**EYE CONTACT:**

cian if irritation develops.

INHALATION: Remove victim to fresh air.

REMOVE FROM SKIN IMMEDIATELY. Take off all contaminated clothing.

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

Do not induce vomiting. Give two glasses of water for dilution. Never give any-INGESTION:

thing by mouth to an unconscious person. Call a physician immediately.

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

EYE CONTACT: Causes 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 AGGRAVATED BY EXPOSURE

CHRONIC: No evidence of aggravation of existing medical conditions.

OVER-EXPOSURE SIGNS/SYMPTOMS

EYE CONTACT: Irritation

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

DELAYED EFFECTS FROM LONG TERM EXPOSURE

No data available.

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

NOTES PHYSICIAN: Do not induce vomiting. Give two glasses of water for dilution.

SPECIFIC TREATMENTS: PROTECTION OF FIRST-AIDERS:

SECTION 5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

FLAMMABLE LIMITS IN AIR (% BY VOLUME): Upper: N/E Lower: N/E

FLASH POINT: F:>200 C>93 Test method: Closed Cup

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

UNSUITABLE EXTINGUISHING MEDIA: None known.

SPECIFIC HAZARDS ARISING FROM THE None known.

CHFMICAL:

UNUSUAL FIRE AND EXPLOSION HAZARDS: During fire, irritating and toxic vapors and gases may be released.

HAZARDOUS THERMAL DECOMPOSITION

CO, CO2, nitrogen oxides, amines, other undetermined compounds. PRODUCTS:







FIRE-FIGHTERS:

SPECIAL PROTECTIVE ACTIONS FOR Full emergency equipment with self-contained breathing apparatus and full protective clothing. Toxic and irritating vapors may be given off in a fire.

FIRE-FIGHTERS:

SPECIAL PROTECTIVE EQUIPMENT FOR Full protective equipment including self-contained breathing apparatus should be used.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

FOR NON-EMERGENCY PERSONNEL:

Evacuate nonessential personnel. 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.

ENVIRONMENTAL PRECAUTIONS:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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 and scoop into a container.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

PROTECTIVE MEASURES:

Always use PPE (see Section 8). Use only with adequate ventilation. Keep containers tightly closed in a cool place away from heat and sources of ignition.

Storage temperature: 40°F/100°F (4°C/38°C)

Shelf Life: 6 months at 72°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 safety shower should be available nearby when this material is handled or used. Avoid environmental contamination.

Specific End Uses: Blend of Amines / Polyols (intended to be mixed with other component of product to form Polyurea).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

APPROPRIATE ENGINEERING CONTROLS:

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

INDIVIDUAL PROTECTION MEASURES

PREVENTIVE MEASURES:

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





EYE PROTECTION: Safety glasses, goggles or face shield.

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

applications.

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

proved respirator.

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

the product.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. REFER TO SECTION 6 FOR ADDITIONAL INFORMATION

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Clear/Pigmented Liquid

PHYSICAL STATE: Liquid

ODOR: Nearly odorless

ODOR THRESHOLD: NA

PH: NA

MELTING POINT: NA
BOILING POINT: NA

FLASH POINT: F: >200° C: >93°

EVAPORATION RATE: NA

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

RAND OPPER EXPLOSIVE: NA

VAPOR PRESSURE: NA
VAPOR DENSITY: NA

RELATIVE DENSITY: 1.01 @ 77°F (clear)

SOLUBILITY: insoluble

PARTITION COEFFICIENT

N-OCTANOL/WATER:

AUTO-IGNITION TEMPERATURE: F > 600° C:>315°

DECOMPOSITION TEMPERATURE: NA

VISCOSITY: 297 cps @ 77°F (25°C)

PERCENT SOLIDS BY WEIGHT: 100

VOLATILE ORGANIC COMPOUNDS (VOC)

BY VOLUME: < 1%

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, isocyanates.

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

PRODUCTS: ucts should not be produced.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Toxicity Data for Aspartic Ester

ORAL LD50: >2000 mg/kg (Rat)

INHALATION LC50: >4000 mg/m3, 4h (Rat)
DERMAL LD50: >2000 mg/kg (Rat)
Skin Irritation: Irritating to skin
Eye Irritation: Slight irritant.
Sensitization: Dermal; sensitizer.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY. Toxic to aquatic organisms. May cause long term adverse effects in the aquatic

environment.

PERSISTENCE AND DEGRADABILITY: No information available.

MOBILITY IN SOIL: No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste should be avoided or minimized whenever possible.

DISPOSAL METHODS: Avoid contact of waste with soil, waterways, drains and sewers. Waste must be

disposed of in accordance with federal state and local environmental control

regulations. Incineration is the preferred method.

SECTION 14. TRANSPORTATION INFORMATION

U.S. DOT (Domestic Surface)

PROPER SHIPPING NAME: Not regulated

CANADIAN TDG

PROPER SHIPPING NAME: Not regulated

ICAO/IATA (Air Transportation)

PROPER SHIPPING NAME: Not Regulated

IMO/IMDG (Water Transportation)

PROPER SHIPPING NAME: Not Regulated

SECTION 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200):

HS Classification: Hazardous

TSCA (TOXIC SUBSTANCE CONTROL ACT): Listed





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

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: Acute Health Hazard

313 REPORTABLE INGREDIENTS: NONE

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.

Massachusetts, New Jersey, or Pennsylvania Right to Know Substance List:

OTHER U.S. STATE INVENTORIES:

Material	CAS#	%
Aspartic Esters (Blend)	Proprietary	42-94%

SECTION 16. OTHER INFORMATION

HMIS HAZARD CLASSIFICATION

HEALTH: 2

NFPA HAZARD CLASSIFICATION: FLAMMABILITY: 1

REACTIVITY: 0

HEALTH: 2

HMIS HAZARD CLASSIFICATION: FLAMMABILITY: 1

REACTIVITY: 0

HISTORY

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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

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

UN = United Nations



