

1. IDENTIFICATION

Product identifier
Product Name ResinForce EasyPoly High Solids 24H - Part B

Other means of identification
SDS # RESIN-014

Recommended use of the chemical and restrictions on use
Recommended Use Polyurea coating.

Details of the supplier of the safety data sheet
Supplier Address

 Resinforce Products LLC
 12 Pixley Industrial Parkway
 Rochester, NY 14624
 Phone: (585) 623-5075

Emergency telephone number
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical state Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Signal Word
Danger
Hazard statements

 Harmful if inhaled
 Causes skin irritation
 Causes serious eye irritation
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May cause an allergic skin reaction
 May cause respiratory irritation


Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of water and soap
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical name	CAS No	Weight-%
Hexamethylene diisocyanate	822-06-0	0.1-15

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call Poison Control or doctor/physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	May be harmful if swallowed. May be harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions As a general precaution, take personal precaution not to breath gas, vapors, or dusts. Do not get in eyes, on skin or clothing. Use appropriate personal protection equipment. In the event of an emergency, evacuate any unnecessary personnel.

Environmental precautions

Environmental precautions As an environmental precaution, prevent spillage to sewers, public waters, and do not penetrate ground/soil. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up For containment, ensure adequate ventilation and absorb any spill with inert liquid binding material and dispose of waste safely.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment. Contaminated work clothing must not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Incompatible Materials Water, amines, strong acids and bases, alcohols, and copper alloys.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hexamethylene diisocyanate 822-06-0	TWA: 0.005 ppm	-	Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.035 mg/m ³

Appropriate engineering controls

Engineering Controls

Local exhaust ventilation required. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Provide sufficient ventilation to keep vapors below permissible exposure limit. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use tightly sealed goggles or safety glasses with side shields which are resistant to Chemicals. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection

Wear chemical resistant protection gloves. Wear impervious clothing as necessary to protect against coming in contact with product. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection

If insufficient ventilation, wear respiratory protection. Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations

Do not eat, drink or smoke during work. Avoid all contact with skin or eye. If clothing comes into contact with material, do not allow out of the workplace. Clean hands and any exposed skin thoroughly after work and before breaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Not determined
Appearance	Clear liquid	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	Approximately 104 °C / 219.2 °F	
Flash point	>194 °C / 381.2 °F	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor Pressure	Butyl acetate: 15 @ 20°C Poly isocyanate: 5.2 x 10 ⁻⁹ @ 20°C	
Vapor Density	No data available	
Relative Density	1.13-1.14	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Water Solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Hyphen	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

In presence of moisture and when in contact with other materials that react with isocyanates, or temperatures above 177 °C may cause polymerization. Avoid heat, sparks, and flame.

Conditions to Avoid

Direct sunlight, extremely high or low temperatures.

Incompatible materials

Water, amines, strong acids and bases, alcohols, and copper alloys.

Hazardous decomposition products

Nitrogen oxides (NOx). Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hexamethylene diisocyanate, oligomers 28182-81-2	-	> 2000 mg/kg (Rat)	= 18500 mg/m ³ (Rat) 1 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Hexamethylene diisocyanate 822-06-0	= 738 mg/kg (Rat)	> 7000 mg/kg (Rat)	= 0.06 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

STOT - single exposure May cause respiratory irritation.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 3,690.00 mg/kg

Dermal LD50 3,093.90 mg/kg

Gas 500.05 ppm

ATEmix (inhalation-dust/mist) 3.511 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hexamethylene diisocyanate 822-06-0		LC50: =26.1mg/L (96h, Brachydanio rerio)	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Not determined

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIC
Hexamethylene diisocyanate, oligomers	X	ACTIVE	X	X	X	X	X	X	X
Hexamethylene diisocyanate	X	ACTIVE	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hexamethylene diisocyanate 822-06-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Hexamethylene diisocyanate - 822-06-0	822-06-0	0.1-15	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hexamethylene diisocyanate 822-06-0	X	X	

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	Flammability	Instability	Special hazards
	-	-	-	-
<u>HMIS</u>	Health hazards	Flammability	Physical hazards	Personal Protection
	-	-	-	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet