

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Sealer, Part B (Matte) Product

Codes(s): SS-500 Part B (Matte) **Synonyms:**

Amine Resin

REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against

General Use: Floor coating

Uses advised against: None known

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

Endurmo

12110 Ellington Ct.

Cincinnati, Ohio 45249

1-331-214-1655

1.4 Emergency telephone numbers: CHEMTREC +1-800-424-9300; +1-703-527-3887 Outside the USA

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Substance

Classification (Regulation (EC) No 1272/2008)

Skin Irritant - Category 2 [H315]

Skin Sensitizer - Category 1 [H317]

Aquatic Chronic - Category 3 [H412]

2.2 Label Elements

Labeling (Regulation (EC) No 1272/2008)

Hazard Symbols



Signal Word:

Warning

Hazard Statement(s):

H315 - Causes skin irritation

H317 - May cause allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements:
[Prevention]

P261 - Avoid breathing vapor, mist and spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P264 - Wash hands and exposed skin areas after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing and eye protection.

[Response]

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P321 - Specific treatment: Refer to Section 4 of this SDS and seek medical attention.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

[Disposal] P501 - Dispose of contents in accordance with national/local regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

% by Weight	Ingredient	CAS Number	EC Number	Index Number	EC Classification
>99	Hexane, 1,6-Diisocyanate, homopolymer	28182-81-2	500-060-2	-----	R43
<1	Hexamethyl-1,6-diisocyanate	822-06-0	212-485-8	615-011-00-1	Xn, R20; R42/43

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

3.2 Mixtures

Chemical characterization (preparation)

Not applicable

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapor or mist causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as

a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 20 minutes, occasionally lifting upper and lower lids. Remove contact lenses, if present and easy to do, after first 5 minutes and continue rinsing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Remove contaminated clothing. Wash affected area with soap and water. Discard contaminated clothing and shoes.

Ingestion: Rinse mouth with water. Remove dentures if any. Do not induce vomiting unless directed to do so by medical personnel. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration of material into the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes mild eye irritation. Symptoms include redness, itching, swelling and tearing.

Skin: Causes moderate skin irritation. Symptoms may include itching, redness, discomfort and possible rash. May cause sensitization by skin contact in susceptible individuals.

Inhalation: May cause irritation of the respiratory tract. This product presents an elevated inhalation health risk when used in spray or aerosol applications.

Chronic: May cause skin sensitization in susceptible individuals.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to Doctor and Hospital Personnel

Application of corticosteroid has been effective in treating skin irritation.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: For small fires, use media such as dry chemical, carbon dioxide, dry sand or limestone powder. For large fires, flood fire area with water from as far as possible, using a protective barrier and appropriate personal protective equipment. Use very large quantities of water applied as a mist or spray; solid streams of water or water jets may be inappropriate.

Unsuitable methods of extinction: Water, alcohol-resistant foam

5.2 Special hazards arising from the substance or mixture

Material will react vigorously with water. Development of hazardous combustion gases or vapors is possible in the event of a fire. Symptoms of overexposure to these gases may not be apparent or may be delayed. Seek medical advice.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control runoff water to prevent environmental contamination. Fire residues and contaminated extinguishing water must be disposed of in accordance with local regulations.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Wear appropriate protective clothing and equipment designated in Section 8.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. Cover drains and contain spill. Cover with a large quantity of inert absorbent (e.g. dry sand, vermiculite). Collect product using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (refer to Sections 7.2 and 10.5).

Prepare a decontamination solution of 0.2 - 5% liquid detergent and 3 - 8% concentrated ammonium hydroxide in water. Treat spill area with the decontamination solution, using about 10 parts of the solution for each part of the spill and allow it to react for at least 10 minutes for trace amounts for 48 hours for large spills. Neutralize the waste. Carbon dioxide will evolve, leaving insoluble polyurea.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Spraying increases the risk of hazardous exposure. Remove all sources of ignition. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

Advice on protection against fire and explosion

Material reacts vigorously with water.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in cool, dry, well-ventilated storage areas. Store in an area suitable for water reactive materials. Minimize exposure to air. Exposure may cause material to degrade. Transfer only to approved containers having correct labeling. Protect containers against physical damage. Keep containers tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not reuse empty containers as they may retain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Avoid skin contact. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

CAS Number	Ingredient	OSHA	ACGIH	NIOSH
822-06-0	Hexamethylene-1,6-diisocyanate	-----	0.005pm TWA	0.005 ppm; 0.035 mg/m3 REL; 0.020 ppm; 0.140 mg/m3 Ceiling

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Eye/face protection: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear PVA gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period. Loose fitting, thermal insulated or leather gloves are recommended.

Other protective equipment: Long sleeve shirts and trousers without cuffs; boots if the situation calls for them.

Respiratory Protection: Always use an approved respirator when vapor/aerosols are generated. Use material under a hood in the lab. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Environmental exposure controls: Do not empty into drains. Risk of explosion.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear, straw colored liquid
Odor	Mild
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	Not determined
Freezing/Melting Point, Range	Not determined
Initial Boiling Point	Not determined
Evaporation Rate	Not determined
Flammability (solid, gas)	Not applicable
Flash Point	158 °C (316.4 °F)
Autoignition Temperature	Not determined
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	Not determined
Upper Explosive Limit (UEL)	Not determined
Vapor Pressure	<0.00 mm Hg
Vapor Density	Not determined
Specific Gravity	1.16
Viscosity	3.00 mPa.s @ 23 °C
Solubility in Water	Reacts energetically
Partition Coefficient: n-octanol/water	6.62 (calculated)
Volatiles by Volume @ 70° F	0%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Reacts energetically with water and polymerization accelerators.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts violently with acids, amines, dryers, polymerization accelerators and easily oxidizable materials. Exothermic reactions with strong acids. Vigorously reacts with water.

10.4 Conditions to avoid

Heat, exposure to moisture

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases, copper alloys, amines, alcohols, metals, water, humid air

10.6 Hazardous decomposition products

Thermal decomposition products include carbon oxides, isocyanates, carbamates, cyanic acids, cyanogen, nitrile, hydrogen cyanide, toxic cyanates

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

No toxicity tests have been carried out for this product.

Acute Oral Toxicity

Expected to have low acute oral toxicity

Acute inhalation toxicity

Hexamethylene-1,6-diisocyanate - LC50, Rat: 0.12 - 0.35 mg/l

Acute dermal toxicity

Hexamethylene-1,6-diisocyanate - LD50, Rat: 599 mg/kg

Skin irritation

Causes moderate skin irritation

Eye irritation

Causes mild eye irritation

Sensitization

May cause sensitization by skin contact

Genotoxicity in vitro

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further information

No component of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, potential or confirmed carcinogen by ACGIH, IARC, NTP or OSHA.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

Acute and prolonged toxicity to fish: LC50 - Fish (Unidentified species), 96 h: >100 mg/l

Toxicity to aquatic invertebrates: EC50 - Daphnia (Water flea), 48 h: >100 mg/l

Toxicity to aquatic plants: EC50 - Scenedesmus subspicatus (Algae), 72 h: >1,000 mg/l

12.2 Persistence and degradability

Not readily biodegradable

12.3 Bioaccumulation potential

Product is not expected to bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The generation of waste should be avoided or minimized whenever possible. Although this product is classified as non-hazardous under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 this material and its container should be disposed of in a safe way as empty containers may contain product residue. Leave chemicals in original containers. No mixing with other waste. Handle unclean containers like the product itself. Incinerate in an approved facility. Do not incinerate closed container. Dispose of in accordance with the Directive 2008/98/EC as well as other national, federal, state/provincial and local laws and regulations.

Hazardous waste: The classification of this product may meet the criteria for a hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

Not regulated for transport.
This product is not a marine pollutant.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard, Chronic Health Hazard

SARA 313 Information: Hexamethylene-1,6-diisocyanate (CAS #822-06-0), contained in trace, is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following reportable substances:

Hexamethylene-1,6-diisocyanate (CAS #822-06-0): RQ = 45.4 kg (100 lbs)

Clean Air Act (CAA)

Hexamethylene-1,6-diisocyanate is listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depleters.

This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories:

Hexamethylene-1,6-diisocyanate (CAS #822-06-0) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, NY, WI.

Canada

WHMIS Hazard Symbol and Classification:



D2B - Skin irritation - Skin sensitizer - Toxic material causing other toxic effects

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): Hexamethylene-1,6-diisocyanate and a proprietary component are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the chemicals in this material are listed on the NPRI.

European Economic Community

Labeling (67/548/EEC to 1999/45/EC)

Risk Phrases: R43 - May cause sensitization by skin contact.
R53 - May cause long-term adverse effects in the aquatic environment.

Safety phrases: S2 - Keep out of reach of children.
S24 - Avoid contact with skin.
S28 - After contact with skin, wash with plenty of soap and water.

WGK, Germany (Water danger/protection): Class 1 - Slightly hazardous to water.

Chemical inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL)	Yes
Canada:	Non-Domestic Substance List (NDSL)	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

*"No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	*
Flammability	1
Physical Hazard	1
Personal Protection	

HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard 2 = MODERATE
0 = INSIGNIFICANT 3 = HIGH
1 = SLIGHT 4 = EXTREME



Safety Glasses



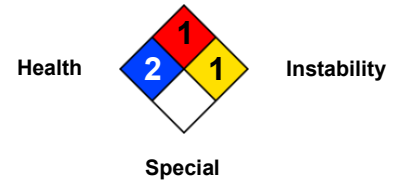
Gloves



Protective Apron

National Fire Protection Association (NFPA)

Flammability



Full Text of Risk (R) – Phrases Referenced in Section 3 (not covered in Section 15)

- R20** Harmful by inhalation.
R42/43 May cause sensitization by inhalation and skin contact.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Preparation Date: 09 August 2014