

Material Safety Data Sheet

Section 1: Product Information

Manufacturer's Name / Address: Versatile Building Products, Inc. 245 Carl Karcher Way Anaheim, CA 92801 Info. Phone: 714-829-2600 Emergency Phone: Infotrac 800-535-5053	Trade Name: 5400 B-Comp. Chemical Family: Aliphatic Isocyanate Intended Use: Architectural Coating
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Section 2: Hazardous Ingredients

<u>Hazardous Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits</u>	<u>% (Optional)</u>
Homopolymer of Hexamethylene Diisocyanate	NE	NE	TWA .5mg/m ³ , STEL 1.0mg/m ³	>50
Hexamethylene Diisocyanate CAS 822-06-0	NE	.005ppm TWA	.034mg/m ³	<0.1
Aliphatic Polyisocyanate Based on HDI (NJTSRN 31765300002)-11755	NE	NE	ND	10-20

VOC of Component: 0g/L VOC as Applied: 0g/L

Section 3: Physical Data

Boiling Point (°C): NE	Specific Gravity: 1.16
Vapor Pressure: ND	Melting Point: NE
Vapor Density: >1	Evaporation Rate: NA
(Air = 1)	(Butyl Acetate = 1)
Solubility in Water: None	pH: ND
Freezing Point: ND	
Coefficient of Oil/Water Distribution:	ND
Appearance and Odor:	Clear Liquid with No Odor.
Odor Threshold:	ND

Section 4: Fire and Explosion Hazard

Flash Point (°C):	>93
Conditions of Flammability:	ND
Flammable Limits:	LEL: NE UEL: NE
Autoignition Temperature (°C):	NE
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, NOx
Sensitivity to Impact:	None
Sensitivity to Static Discharge:	May ignite product.
Extinguishing Media:	Dry foam, chemical, carbon dioxide.
Special Firefighting Procedures:	Use self-contained breathing apparatus and full protective clothing.
Unusual Fire and Explosion Hazards:	HDI vapors and other irritating toxic gases may be generated by combustion. Heated containers may rupture. Cool containers with water spray.

Section 5: Health Hazard Data

Primary Routes of Entry: Eye Inhalation Skin Contact Ingestion

(NA = Not Applicable) (NE = Not Established) (ND = No Data)
(NR = Not Required)

Overexposure Effects: Dizziness, nausea, headaches, drowsiness, asthmatic and pulmonary complications, unconsciousness and death.

Conditions Aggravated by Exposure: Respiratory tract conditions such as asthma and bronchitis: existing skin dermatitis and rashes may be aggravated by exposure. Pre-existing sensitization to isocyanates.

Health Hazards (Acute and Chronic Exposures):

Inhalation

Acute:

Irritation of the mucous membranes. Runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Bronchitis, bronchial spasm and pulmonary edema. These effects are usually reversible. Chemical or hypersensitive pneumonitis with flu-like symptoms has been reported.

Chronic:

Isocyanate sensitization (chemical asthma.) Symptoms are similar to asthma and vary in intensity. Permanent lung damage may occur. Effects could be immediate or delayed up to several hours. Symptoms may persist for weeks and in severe cases for several years. Sensitization may be temporary or permanent.

Skin Contact

Acute:

Irritation, redness, and pain. Swelling, rash, scaling, and blistering. Skin sensitization may occur. Skin contact may lead to skin dermatitis..

Chronic:

Chronic skin exposure will give effects similar to chronic inhalation. Those with skin sensitization may develop symptoms of exposure by small amounts of skin contact and/or inhalation.

Skin Absorption

Acute:

ND

Chronic:

ND

Eyes

Acute:

Vapors of this product are irritating to the eye and can cause tearing, reddening, and swelling accompanied by a stinging sensation.

Chronic:

May result in corneal opacity (clouding of the eye surface).

Ingestion

Acute:

Irritation of the gastrointestinal tract. Nausea. May be corrosive to the gastrointestinal lining.

Chronic:

ND

Emergency and First Aid Procedures:

General:

Treat symptomatically. If not breathing administer artificial respiration.

Eyes:

Immediately rinse eyes with a direct stream of water for 15 minutes while holding the eyelids open. Seek immediate follow-up with a physician or ophthalmologist..

Skin:

Immediately wash contaminated skin with abundant water and mild soap. If symptoms persist seek medical advice.

Inhalation:

Remove effected person to fresh air. Administer artificial respiration if not breathing and unconscious. Give oxygen if breathing is labored. Seek medical attention. Symptoms may develop in a delayed manner relative to exposure.

Ingestion:

DO NOT INDUCE VOMITING. Give 1-2 cups of milk. Should vomiting occur keep head lower than hip level to prevent aspiration of fluid into the lungs. Seek medical attention immediately.

Note to Physician;

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

Workplace vapors could produce reversible corneal epithelia edema impairing vision. SKIN: HDI is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. INGESTION: Treat symptomatically.

There is no specific antidote. Inducing vomiting is contraindicated because of irritating nature of the product.

INHALATION: HDI is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having dermal or pulmonary sensitization reaction to this material must be removed from further exposure to any Isocyanate.

Carcinogenic Data:

NTP: Not Listed

OSHA: Not Regulated

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IARC: Not Listed

Toxicological Data:

Estimates based HDI Homopolymers:

ORAL LD50(Rat) >10000mg/KG,

Dermal LD50 (Rabbit) 5000mg/KG,

Inhalation LC50 (Rat) 137-1150mg/m3 were obtained in rats exposed to aerosols. (4H exposure)

Eye Effects: Severe irritant capable of inducing corneal injury (rabbit); maximum primary eye score: 54.6/110 for 24 hr. exposure.

Skin Effects: Moderate irritant; primary dermal irritation score: 3.4/8.0 (rabbit).

Sensitization: Pulmonary and dermal sensitizer in animals and humans. Evidence exists that cross-sensitization between HDI and other isocyanates, particularly hydrogenated MDI and TDI, can occur.

Section 6: Reactivity Data

Chemical Stability: Stable Unstable

Conditions to Avoid: Excessive heat and cold, moisture.

Incompatibility (Materials to Avoid) : Water, amines, strong bases, alcohols, metal compounds and surface active materials..

Hazardous Decomposition Products: From combustion: Carbon monoxide, carbon dioxide, NOx, HCN, HDI and undetermined aliphatic fragments.

Hazardous Polymerization (Reactivity) : Will Not Occur May Occur – Reacts w/ moisture and heat over 400F.

Section 7: Spill and Leak Procedures:

Steps to be Taken in Case of Material Release or Spillage: Evacuate non-essential personnel. Remove sources of ignition. Ventilate area. Contain spill. Notify proper authorities as necessary. Cover spill with absorbent material. Pour decontamination solution (Ammonia 3-8%, Detergent 2%, and water 95%) over contaminated area and allow to react for 15 minutes. Collect spill into open waste containers and add more decontamination solution. Cover loosely for 48-96 hours as outgassing will occur. Wear respiratory protection and protective clothing during cleanup.

Waste Disposal Methods: Dispose of material in accordance with local, state and federal regulation.

Ecological Information: ND

Ecotoxicity: ND

Section 8: Special Protection Information

Engineering Controls: Ventilation to maintain TWA and STEL exposure limits. Shut off all open sources of ignition.

Respiratory Protection: NIOSH approved respirator capable of filtering organic particulates should be worn when handling product. In environments such as spray application or where product may be aerosolized, a respirator that is recommended or approved for use in isocyanate-containing environments (air purifying or fresh air supplied) must be worn.

Protective Gloves: Nitrile or butyl rubber gloves must be worn when handling the product. NO Vinyl gloves.

Eye Protection: Chemical goggles and/or face shield must be worn when handling the product. Vapor resistant goggles should be worn when contact lenses are in use.

Other protective Equipment: Eye wash station and emergency shower should be in close proximity to areas where product is being handled. Impermeable clothing should be worn and cover exposed skin. Clean contaminated clothing before reuse.

Section 9: Handling and Storage

General: Store away from open sources of ignition, excessive heat, excessive cold, oxidizers, strong acids, moisture, amines; store in well ventilated areas.

Section 10: Supplemental Information

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Health: 2***Flammability:** 1**Reactivity:** 1

* = Chronic health hazard

DOT Proper Shipping Name: Other regulated substances, liquid, n.o.s.(contains Hexamethylene-1,6-Diisocyanate)**Hazard Class :** 9**UN Number:** NA 3082**Packing Group:** III**IMO Shipping Data:** Not regulated**ICAO/IATA Shipping Data :** Not-regulated**TSCA (Toxic Substance Control Act) :**

All components of this product are listed in the TSCA inventory.

CERCLA (Comprehensive Response Compensation and Liability Act):

Hexamethylene Diisocyanate (HDI): 100lbs.

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Acute Health Hazard, Chronic health, Reactivity Hazard.

Section 313 Toxic Chemicals: None

RCRA Status: If discarded in its purchased form, this product would not be hazardous waste either by listing or characteristic. Under RCRA it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as hazardous waste. (40CFR 261.20-24)

California Proposition 65 : Below is a list of compounds known to the State of California to cause cancer, birth defects, or other reproductive harm:

None

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the accuracy of the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects, which may be caused by exposure to our products. Customers and users of this product must comply with all applicable health and safety laws, regulations and orders.