

Safety Data Sheet

DAUBERT
CHEMICAL COMPANY, INC.

Stock Number: 8620061
Revision Date: 02-26-2019
Replaces: 09-05-2018

DAUBOND® HARDENER 5.0

1. Identification

Product identifier used on the label: **DAUBOND® HARDENER 5.0**
Stock Number: 8620061

Other means of identification:

Synonyms: None
Chemical family: Mixture

Recommended use of the chemical and restrictions on use:

Recommended use: Urethane Curing Agent
Restrictions on use: Uses other than those described above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party: Daubert Chemical Company
4700 S. Central Avenue
Chicago, IL 60638

Telephone number: 1-708-496-7350
E-mail address: SDS@Daubert.com
Emergency phone number: Chemtrec: (800) 424-9300

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

GHS Hazard
Symbols:



GHS Classification: Respiratory Sensitization Category 1; Skin Sensitization Category 1;
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3; Acute Toxicity - Inhalation Vapour Category 4

Signal Word: Danger

Hazard Statements: May cause an allergic skin reaction
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness

Unclassified Hazards (HNOC):: None Identified

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Precautionary Statements:

Prevention:

Avoid breathing dust/fume/gas/mist/ vapors/spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection.

Response:

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Specific treatment: see Section 4 on this SDS.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Storage:

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

Store locked up.

Disposal:

Dispose of contents/container to a suitable disposal site in accordance with local/national/international regulations.

Hazards not otherwise classified:

No data available

3. Composition/information on ingredients

Chemical Name	Common name and synonyms	CAS #	%
Hydrophilic Aliphatic Polyisocyanate	None	160994-68-3	80 - 100
Hexamethylene diisocyanate	None	822-06-0	0.1 - 1

Specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

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Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eye Contact:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Provide medical care provider with this SDS.
Most important symptoms/effects, acute and delayed:	May cause an allergic skin reaction Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause respiratory irritation May cause drowsiness or dizziness
Indication of immediate medical attention and special treatment needed, if necessary:	Consult a physician. Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.

Hazardous combustion products: Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases

Special protective equipment and precautions for fire-fighters: No data available

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Methods and materials for containment and cleaning up:

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

7. Handling and storage

Precautions for safe handling:

Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin and clothing. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Conditions for safe storage, including any incompatibilities:

Safe storage conditions:

Prevent contact with moisture. Moisture will impact product performance. Do not store in direct sunlight. Store in tightly sealed original container. Store in a cool dry place. Store between 41°F and 86°F (5-30°C).

Materials to Avoid/Chemical Incompatibility:

Strong oxidizing agents, Acids, Amines, Strong alkalies, Water, Alcohols, Copper alloys, Heavy Metals,

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical component	OSHA PEL	ACGIH TLV	ACGIH STEL	IDLH
Hexamethylene diisocyanate		.005 ppm	No data available	No data available

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Appropriate engineering controls:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits

Ventilation is required to maintain operator exposure below published exposure limits.

Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910.

Individual protection measures, such as personal protective equipment:

Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Wear a NIOSH approved respirator if any exposure is possible. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator.

Respirator Type(s):

Use supplied-air respiratory equipment as required.

Eye protection:

Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

In addition, wear a full face shield.

Skin protection:

Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Chemically resistant gloves

Other protective equipment:

Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

In addition, wear a full face shield.

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General hygiene conditions:

Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin and clothing. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

9. Physical and chemical properties

Appearance (physical state, color etc.):

Physical state: Liquid
Color: Colorless to pale yellow

Odor: Slight

Odor Threshold: No data available

pH: No data available

Melting point/freezing point (°C):

Melting Point (°C): -24

Freezing point (°C): -24

Initial boiling point and boiling range (°C): >300

Flash Point: 439 °F(226 °C)

Evaporation Rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits:

Upper flammability or explosive limits: No data available

Lower flammability or explosive limits: No data available

Vapor pressure: 1800 Pa

Vapor density: No data available

Relative density: 1.16

Solubility(ies): Reacts with water.

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature (°C): No data available

Decomposition Temperature (°C): 430

Viscosity: 2000 - 4000 cP

Volatiles, % by weight: 0

VOC, Material, lb/gal 0

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VOC, Material, grams/liter 0

VOC minus exempt solvents & water, g/l 0

10. Stability and reactivity

Reactivity:	Not expected to be reactive
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 (e.g., static discharge, shock, or vibration):	High temperatures. Contamination.
Incompatible materials:	Strong oxidizing agents, Acids, Amines, Strong alkalies, Water, Alcohols, Copper alloys, Heavy Metals,
Hazardous decomposition products:	Under normal conditions of use & storage, decomposition and hazardous decomposition products are unlikely.

11. Toxicological information

Description of the various toxicological (health) effects and the available data used to identify those effects:

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Eye contact, Skin contact, Absorption, Inhalation

Symptoms related to the physical, chemical and toxicological characteristics: May cause an allergic skin reaction. Harmful if inhaled. . May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Ingestion Toxicity:	Harmful if swallowed.
Skin Contact:	May cause sensitization.
Inhalation Toxicity:	Can cause systemic damage.
Eye Contact:	Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Sensitization:	May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled
Mutagenicity:	No data

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Reproductive and Developmental Toxicity: No data available

Carcinogenicity: There are no carcinogenic ingredients present at or over 0.1%.

STOT-single exposure: Classification has been based on toxicological information of the components in Section 3.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Numerical measures of toxicity (such as acute toxicity estimates):

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hexamethylene diisocyanate	Oral LD50 Rat 746 mg/kg	Dermal LD50 Rabbit > 7000 mg/kg	Inhalation LC50 (4h) Rat 0.124 mg/L

Is the hazardous chemical listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has it been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA?:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.			

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): No data available

Ecological Toxicity Data:

Chemical Name	CAS #	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Hexamethylene diisocyanate	822-06-0	LC50(48HR) Daphnia >= 89.1 mg/L	EC50(72HR) GREEN ALGAE > 77.4 mg/L	LC50(96 HR) ZEBRA FISH >= 82.8 mg/L

Persistence and degradability: No data

Bioaccumulative potential: No data available

Mobility in soil: No data available

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Other adverse effects (such as hazardous to the ozone layer):	No data available
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13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:	Dispose of contents/container to a suitable disposal site in accordance with local/national/international regulations. Dispose of in accordance with Local and National regulations.
Waste codes / waste designations:	Not applicable

14. Transport information

Domestic Ground in containers <= 119 GL	Cement, Adhesive /Non-Hazardous
Domestic Ground in containers > 119 GL	Cement, Adhesive /Non-Hazardous
Shipping name for Export, Air (IATA)	Cement, Adhesive /Non-Hazardous
Shipping name for Export, Sea (IMDG)	Cement, Adhesive /Non-Hazardous
Marine Pollutant?	No

15. Regulatory information

Status of formula components on selected national regulatory inventories:

LIST	STATUS
TSCA	All components in this product are on the TSCA Inventory or exempt.
Canadian DSL	One or more chemical substances in this material are on the Canadian NDSL and the remainder are included on the Canadian DSL or are exempt.

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Chemical Name	CAS #	Regulation	Percent
Contains no components from California Prop. 65 - Cancer list		Prop. 65 - Cancer	
Contains no components from California Prop. 65 - Developmental/Reproductive list		Prop. 65 - Developmental and/or Reproductive	
Hexamethylene diisocyanate	822-06-0	CERCLA	0.1 - 1 RQ = 100 lbs.
Hexamethylene diisocyanate	822-06-0	SARA 313	0.1 - 1
No SARA 302 EHS-listed chemicals in this product.		SARA EHS	

16. Other information, including date of preparation or last revision.

SDS Prepared by: DAUBERT\HALINSKI

Revision Date: 02-26-2019

Revision Number: 6

Reason for revision: Reviewed
Approved: M. Hogan

Disclaimer: Although the information contained herein is believed to be reliable, it is furnished without warranty of any kind. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage.