



Material Safety Data Sheet

CHEMTREC Transportation Emergency Phone:
800-424-9300
Pittsburgh Poison Control Center Health
Emergency No.: 412-681-6669

NOTE: The CHEMTREC Transportation Emergency Phone is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. Identification

Product Name: URETHANE CONVERTER 811 **Revision Date:** 4/24/2013

Identification Number: 0856B1NL **Supersedes Date:** 3/28/2011

Product Use/Class: Catalyst for Polyurethane Products - FOR INDUSTRIAL USE ONLY

Manufacturer: Carboline Company
 2150 Schuetz Road
 St. Louis, MO 63146
 800-848-4645

Preparer: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Harmful if inhaled. Violent chemical reaction; water reactive. Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water. Causes eye, skin, and respiratory tract irritation. May cause sensitization of susceptible persons. Combustible liquid and vapour. Keep away from heat and sources of ignition. Use with adequate ventilation. May be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause allergic skin reaction. May cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Vapours may be irritating to eyes, nose, throat, and lungs. May cause allergic respiratory reaction. Harmful if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Liver and kidney injuries may occur.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Prolonged exposure can be harmful for certain organs, e.g. liver, kidneys, blood, nervous system and skin.

MEDICAL CONDITIONS PRONE TO AGGRAVATION: Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Hazardous Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
HOMOPOLYMER OF HDI	28182-81-2	90.0	N/E	N/E	N/E	N/E
N-BUTYL ACETATE	123-86-4	5.0	150 PPM	200 PPM	710 MG/M3	N/E
AROMATIC HYDROCARBON	64742-95-6	5.0	N/E	N/E	N/E	N/E
HEXAMETHYLENE DIISOCYANATE	822-06-0	1.0	0.005 PPM	N/E	N/E	N/E

4. First-aid Measures

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

5. Fire-fighting Measures

Flash Point, °F:	127F (53C)	Lower Explosive Limit, %:	0.9
(Setaflash)		Upper Explosive Limit, %:	7.6
Extinguishing Media:	Carbon Dioxide, Dry Chemical, Foam		

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible Liquid Provide adequate ventilation. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

SPECIAL FIREFIGHTING PROCEDURES: Combustible material Cool containers / tanks with water spray. In the event of fire, wear self-contained breathing apparatus.

6. Accidental Release Measures

PERSONAL SAFETY MEASURES/ENVIRONMENTAL MEASURES/METHOD OF CLEANING/CONTAINMENT: Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Evacuate personnel to safe areas. Wear personal protective equipment. For personal protection see section 8. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not allow material to contaminate ground water system. Prevent product from entering drains.

7. Handling and Storage

INSTRUCTIONS FOR SAFE HANDLING : Do not breathe vapours or spray mist. Do not get in eyes, on skin, or on clothing. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Prepare the working solution as given on the label(s) and/or the user instructions.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

SKIN PROTECTION: Lightweight protective clothing Impervious gloves Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Request information on glove permeation properties from the glove supplier.

EYE PROTECTION: Safety glasses with side-shields

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Boiling Range:	262 F (128 C) - 262F (128C)	Vapor Density:	Heavier than Air
Odor:	Slight Odor	Odor Threshold:	N/D
Appearance:	Colorless, Mobil Liquid	Evaporation Rate:	Slower Than Ether
Solubility in Water:	Reacts	Specific Gravity:	1.12
Freeze Point:	N/D	pH:	N/D
Physical State:	Liquid	Vapor Pressure:	No Information

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Heat, flames and sparks.

MATERIALS TO AVOID: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

STABILITY: Stable under normal conditions.

11. Toxicological Information

Chemical Name	CAS-No.	LD50	LC50
HOMOPOLYMER OF HDI	28182-81-2	5000 mg/kg, oral, rat	390 mg/m ³ , inhalation, rat
N-BUTYL ACETATE	123-86-4	10760 mg/kg, rat, oral	23.4 mg/l/4/h (rat)
AROMATIC HYDROCARBON	64742-95-6	4700 mg/kg, oral, rat	3670 ppm/8 hours, rat, inhalation
HEXAMETHYLENE DIISOCYANATE	822-06-0	710 mg/kg, oral rat	23 ppm / 4 hrs

12. Ecological Information

ECOLOGICAL INFORMATION: No information available.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of in accordance with local regulations.

14. Transport Information

DOT Proper Shipping Name:	Paint	Packing Group:	III
DOT Technical Name:	N/A	Hazard Subclass:	N/A
DOT Hazard Class:	3	Resp. Guide Page:	128
DOT UN/NA Number:	UN 1263		
Additional Notes:	No Information		

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
HEXAMETHYLENE DIISOCYANATE	822-06-0

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS-No.</u>
ETHYL BENZENE	100-41-4
CUMENE	98-82-8

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
TOLUENE	108-88-3

International Regulations:**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B3 D2A D2B

16. Other Information**HMIS Ratings:**

Health: 2 **Flammability:** 3 **Reactivity:** 1 **Personal Protection:** X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): Refer to Part A MSDS

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.