



# 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

## Section 1 - Chemical Product / Company Information

**Product Name:** URETHANE CONVERTER 811      **Revision Date:** 09/01/2010  
**Identification Number:** PLMSDS 0856B1NL      **Supercedes :** 09/11/2007  
**Product Use/Class:** Catalyst for Polyurethane Products  
- FOR INDUSTRIAL USE ONLY      **Preparer:** Regulatory, Department  
**Manufacturer:** Carboline Company  
2150 Schuetz Road  
St. Louis, MO 63146  
(800) 848-4645

## Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA-CEIL
HOMOPOLYMER OF HDI	28182-81-2	90.0	N/E	N/E	N/E	N/E
N-BUTYL ACETATE AROMATIC	123-86-4	5.0	150 PPM	200 PPM	710 MG/M3	N/E
HYDROCARBON 1,2,4 TRIMETHYLBENZENE	64742-95-6	5.0	N/E	N/E	N/E	N/E
95-63-6	95-63-6	5.0	25 PPM	N/E	125 MGM3	N/E
HEXAMETHYLENE DIISOCYANATE	822-06-0	0.3	0.005 PPM	N/E	N/E	N/E

## Section 3 - Hazards Identification

**Emergency Overview:** COMBUSTIBLE liquid and vapor. Reacts violently with common materials including water, alcohols, bases and amines. Harmful if inhaled. Eye, skin and respiratory tract irritant. Possible sensitizer.

**Effects Of Overexposure - Eye Contact:** May cause eye irritation.

**Effects Of Overexposure - Skin Contact:** Irritant. May produce symptoms similar to those from inhalation. Can cause dryness, loss of natural oils, allergic reaction.

**Effects Of Overexposure - Inhalation:** Harmful if inhaled. May cause hoarseness, upper respiratory tract irritation, intoxication, headache, confusion, coma, liver damage, kidney damage.

**Effects Of Overexposure - Ingestion:** Harmful if ingested. May produce symptoms similar to those from inhalation. Can cause nausea, abdominal cramps.

**Effects Of Overexposure - Chronic Hazards:** Prolonged contact may cause liver damage, kidney damage, chronic damage to intestines, central nervous system damage, dizziness, weakness, headache, nausea. Repeated, prolonged contact may cause intestinal disturbances. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

**Primary Route(s) Of Entry:** Skin Contact, Skin Absorption, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** If sensitized to isocyanates or other chemicals, do not use. See a physician if a medical condition exists. If you have a condition that could be aggravated by exposure to dust or organic vapors, see a physician prior to use.

## Section 4 - First Aid Measures

**First Aid - Eye Contact:** If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

**First Aid - Skin Contact:** In case of contact, immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

**First Aid - Inhalation:** If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe.

**First Aid - Ingestion:** If swallowed do not induce vomiting. Seek immediate medical attention.

## Section 5 - Fire Fighting Measures

**Flash Point, F:** 127F (53C)  
(Setaflash)

**Lower Explosive Limit, %:** 0.9  
**Upper Explosive Limit, %:** 10.4

**Extinguishing Media:** Carbon Dioxide, Dry Chemical, Foam

**Unusual Fire And Explosion Hazards:** Combustible Liquid. Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and to wear conductive and non-sparking shoes.

**Special Firefighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Cool tightly closed containers exposed to fire with water. Combustible. Cool fire-exposed containers using water spray.

## Section 6 - Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow exposure controls/personal protection guidelines in Section 8. Contain and soak up residual with an absorbent (clay or sand). Take up absorbant material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section 15 for SARA Title III and CERCLA information.

## Section 7 - Handling And Storage

**Handling:** Do not get in eyes, on skin, or on clothing. Keep container tightly closed when not in use. Wear personal protection equipment. Do not breathe vapors. Wash thoroughly after handling. If pouring or transferring materials, ground all containers and tools. Do not weld, heat, cut or drill on full or empty containers. Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

**Storage:** Keep away from heat, sparks, open flames and oxidizing agents. Keep containers closed. Store in a cool, dry place with adequate ventilation.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Use explosion-proof ventilation when required to keep below health exposure

guidelines and Lower Explosion Limit (LEL).

**Respiratory Protection:** Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use. For silica containing coatings in a liquid state, and/or if no exposure limits are established in Section 2 above, supplied air respirators are generally not required.

**Skin Protection:** Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure.

**Eye Protection:** Recommend safety glasses with side shields or chemical goggles to avoid eye contact.

**Other protective equipment:** Eye wash and safety showers should be readily available.

**Hygienic Practices:** Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and allow hazardous materials to pass through. Check shoes carefully after soaking before reuse.

## Section 9 - Physical And Chemical Properties

<b>Boiling Range:</b>	262 F (128 C) - 262F (128C)	<b>Vapor Density:</b>	Heavier than Air
<b>Odor:</b>	Slight Odor	<b>Odor Threshold:</b>	N/D
<b>Appearance:</b>	Colorless, Mobil Liquid	<b>Evaporation Rate:</b>	Slower Than Ether
<b>Solubility in H2O:</b>	Reacts		
<b>Freeze Point:</b>	N/D	<b>Specific Gravity:</b>	1.12
<b>Vapor Pressure:</b>	N/D	<b>PH:</b>	N/D
<b>Physical State:</b>	Liquid		

(See section 16 for abbreviation legend)

## Section 10 - Stability And Reactivity

**Conditions To Avoid:** Heat, sparks and open flames.

**Incompatibility:** Keep away from strong oxidizing agents, heat and open flames.

**Hazardous Decomposition Products:** Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

**Hazardous Polymerization:** Will not occur under normal conditions.

**Stability:** This product is stable under normal storage conditions.

## Section 11 - Toxicological Information

**Product LD50:** N/D

**Product LC50:** N/D

Chemical Name	CAS Number	LD50	LC50
HOMOPOLYMER OF HDI	28182-81-2	>5000 MG/KG, ORAL, RAT	3124 MG/KG
N-BUTYL ACETATE	123-86-4	7.4 G/KG RABBIT ORAL	>1800 PPM/6H INHALATION
AROMATIC HYDROCARBON	64742-95-6	4700 MG/KG, ORAL, RAT	3670 PPM/8 HOURS, RAT, INHALATION
1,2,4 TRIMETHYLBENZENE	95-63-6	5 GM/KG, ORAL, RAT	18 GM/M3/4HOURS
HEXAMETHYLENE DIISOCYANATE	822-06-0	710 MG/KG, ORAL RAT	23 PPM / 4 HRS

## Section 12 - Ecological Information

**Ecological Information:** No data

## Section 13 - Disposal Information

**Disposal Information:** Dispose of in accordance with State, Local, and Federal Environmental regulations. Responsibility for proper waste disposal is with the owner of the waste.

## Section 14 - Transportation Information

<b>DOT Proper Shipping Name:</b>	Paint	<b>Packing Group:</b>	III
<b>DOT Technical Name:</b>	N/A	<b>Hazard Subclass:</b>	N/A
<b>DOT Hazard Class:</b>	3	<b>Resp. Guide Page:</b>	128
<b>DOT UN/NA Number:</b>	UN 1263		

**Additional Notes:** None.

## Section 15 - Regulatory Information

### 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:

IMMEDIATE HEALTH HAZARD, FIRE 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 Number</u>
1,2,4 TRIMETHYLBENZENE	95-63-6
HEXAMETHYLENE DIISOCYANATE	822-06-0

### TOXIC SUBSTANCES CONTROL ACT

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

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) Substances exist in this product

### U.S. STATE REGULATIONS AS FOLLOWS:

#### NEW JERSEY RIGHT-TO-KNOW

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

#### PENNSYLVANIA RIGHT-TO-KNOW

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

#### 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 Number</u>
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CUMENE  
ETHYL BENZENE

98-82-8  
100-41-4

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

**Chemical Name**  
TOLUENE

**CAS Number**  
108-88-3

**INTERNATIONAL REGULATIONS AS FOLLOWS:**

**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

<b>Section 16 - Other Information</b>
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**HMIS Ratings**

**Health:** 2

**Flammability:** 3

**Reactivity:** 1

**Personal Protection:** X

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

**REASON FOR REVISION:** Changes made in Section(s) 1, 8, and 15.

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

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