

SECTION I - PRODUCT: URETHANE CONVERTER 133 (0840B1NL)  
Date: 07/17/00 Replaces 11/13/97

CHEMTREC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300  
PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
POLYMERIC HDI	28182-81-2	75%	0.005PPM	0.02CPPM	NE
BUTYL ACETATE	123-86-4	15%	150 PPM	200 PPM	NE
XYLENE	1330-20-7	10%	100 PPM	150 PPM	NE
ETHYL BENZENE	100-41-4	5%	100 PPM	125 PPM	NE
HDI ISOCYANATE	822-06-0	2%	0.005PPM	0.02PPM	NE

CHEMICAL NAME	HAZARDOUS INGREDIENTS (F)	ADDITIONAL DATA	(G)
POLYMERIC HDI	>10000MG/KG ORAL	>5000MG/KG DERMAL	NO/NO/1,2
BUTYL ACETATE	7.4 G/KG RABBIT ORAL		NO/NO/1,2,3
XYLENE	>1800 PPM/6H INHALATION		
	4300MG/KG RAT, ORAL		NO/YES/1,2,3/ 1000#/U239
ETHYL BENZENE	15000 PPM/4HRS RAT, INHALATION		NO/YES/1,2,3/ 1000#
HDI ISOCYANATE	710MG/KG ORAL	570MG/KG DERMAL	NO/NO
	23PPM 4 HRS		

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route, LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CERCLA. NE = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

WHMIS CLASSIFICATION: B2 -- D2A -- D2B  
HMIS/NFPA CLASSIFICATION: HEALTH 3, FLAMMABILITY 3, REACTIVITY 1,  
PERSONAL PROTECTION CODE G, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: 259F(126C)-284F(140C). VAPOR DENSITY: Heavier than air.  
EVAPORATION RATE: Slower than ether. VOLATILE BY WEIGHT 25 %. VOLATILE BY VOLUME: 29 %. PRODUCT WT/GAL: 8.9 LBS/U.S.GAL. 1.07 sp gr.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: 91 F(32C) (Setaflash) LEL 1.0 % UEL 7.6 %.  
OSHA-FLAMMABLE/LIQUID/OSHA/CLASS/IC, DOT-PAINT, 3, UN1263, PGIII, CANADIAN TDGA: PAINT, 3, UN1263, PGIII  
EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.  
FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate.

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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 nonferrous tools and to wear conductive and non-sparking shoes.

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire exposure.

**SECTION V - HEALTH HAZARD DATA:**

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**INHALATION:** Harmful if inhaled, may affect the brain or nervous system, causing dizziness, headache or nausea. May cause nose and throat irritation. May cause lung irritation. Contains HEXAMETHYLENE DIISOCYANATE which may cause allergic respiratory reaction, effects may be permanent.

**CONTACT:** May cause eye irritation. May cause skin irritation. May cause allergic skin reaction.

**NOTICE:** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

**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.

**PRIMARY ROUTE(S) OF ENTRY:** Inhalation, Dermal, Ingestion.

**EMERGENCY FIRST AID PROCEDURES:** When exposed always get medical attention.

**EYE CONTACT:** Flush with water for 15 minutes.

**SKIN CONTACT:** Wash with soap and water. Remove contaminated clothing and clean before reuse.

**INHALATION:** Remove to fresh air. Provide oxygen if breathing is difficult. Use artificial respiration if not breathing. Get medical attention.

**IF SWALLOWED:** DO NOT INDUCE VOMITING!! Always get medical attention.

**SECTION VI - REACTIVITY DATA:**

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

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**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.

**CONDITIONS TO AVOID:** Heat, sparks, and open flames.

**INCOMPATIBILITY:** Avoid contact with strong oxidizing agents.

**SECTION VII - SPILL OR LEAK PROCEDURES:**

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**IF SPILLED:** Eliminate all ignition sources.

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Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow safe handling and use guidelines in section VIII. Contain and soak up residual with an absorbent (clay or sand). Take up absorbent material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section II for Sara Title III and CERCLA information.

**SECTION VIII - SAFE HANDLING AND USE INFORMATION:**

**RESPIRATORY PROTECTION:** Use only with ventilation to keep levels below exposure guidelines. (Section II). User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use.

**VENTILATION:** Use explosion-proof ventilation when required to keep below health exposure guidelines and Lower Explosion Limit (LEL).

**SKIN AND EYE PROTECTION:** Recommend impervious gloves, clothing and safety glasses with side shields or chemical goggles to avoid skin and eye contact. If material penetrates the skin, change gloves and clothing. Hypersensitive persons should wear gloves or use protective cream.

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

**APPLICATION:** Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

**SECTION IX - SPECIAL PRECAUTIONS:**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Keep away from heat, sparks, open flame, and strong oxidizing agents. Keep containers closed. Store in cool, dry place with adequate ventilation. If pouring or transferring materials, ground all containers and tools.

**OTHER PRECAUTIONS:** Do not weld, heat, cut or drill on full or empty containers.

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 damage 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.

Carboline Company 350 Hanley Ind. Ct. St. Louis, MO 63144

FOR INDUSTRIAL USE ONLY

CARBOLINE CO. MATERIAL SAFETY DATA SHEET  
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SPECIFIC STATE REGULATORY INFORMATION

NEW JERSEY

PENNSYLVANIA

Non-Hazardous Materials above 1 Percent:

Name	CAS	Pct
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No materials meet this criteria

CALIFORNIA

WARNING: This product contains a chemical(s)  
known to the State of California to cause  
cancer, and birth defects or other reproductive harm.