



Safety Data Sheet
 prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 0856B1NL
- Product Name:** URETHANE CONVERTER 811 **Revision Date:** 06/17/2015
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Hardener for 2 components coatings - Industrial use. **Supersedes Date:** 05/31/2015
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Company
 2150 Schuetz Road
 St. Louis, MO USA 63146
- Regulatory / Technical Information:
 Contact Carboline Technical Services at
 1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - ehs@stoncor.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
 CHEMTREC +1 703 5273887 (Outside US)
 HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4
 Hazardous to the aquatic environment, Chronic, category 3
 Flammable Liquid, category 3
 Respiratory Sensitizer, category 1
 STOT, single exposure, category 3, RT1
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

HEXAMETHYLENE DIISOCYANATE, HOMOPOLYMER OF HDI

GHS HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

GHS PRECAUTION PHRASES

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
28182-81-2	HOMOPOLYMER OF HDI	75-100
123-86-4	N-BUTYL ACETATE	2.5-10
64742-95-6	AROMATIC HYDROCARBON	2.5-10
822-06-0	HEXAMETHYLENE DIISOCYANATE	0.1-1.0

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
28182-81-2	GHS07	H317-332-335	0
123-86-4	GHS02-GHS07	H226-336	0
64742-95-6	GHS02-GHS08-GHS09	H226-411	0
822-06-0	GHS06-GHS08	H302-315-317-319-330-334-335	0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

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

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

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.

4.2 Most important symptoms and effects, both acute and delayed

May be harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS: Humid air and/or water will produce carbon dioxide which will pressurize the container. Combustible Liquid Provide adequate ventilation. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

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

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

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).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

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

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.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks. Exposure to moisture.

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.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

Name	%	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL- TWA	OSHA PEL- CEILING	OEL Note
HOMOPOLYMER OF HDI	75-100	N/E	N/E	N/E	N/E	
N-BUTYL ACETATE	2.5-10	150 PPM	200 PPM	710 MG/M3	N/E	
AROMATIC HYDROCARBON	2.5-10	N/E	N/E	N/E	N/E	
HEXAMETHYLENE DIISOCYANATE	0.1-1.0	0.005 PPM	N/E	N/E	N/E	

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

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.

EYE PROTECTION: Safety glasses with side-shields.

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

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

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

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Colorless, Mobil Liquid
Physical State	Liquid

Odor	Slight Odor
Odor threshold	
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	262 F (128 C) - 262F (128C)
Flash Point, (°C)	53
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.9 - 7.6
Vapour Pressure, mmHg	N/D
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	Reacts
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	Refer to Part A MSDS
Specific Gravity (g/cm³)	1.12

10. Stability and Reactivity

10.1 Reactivity

Water reactive

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks. Exposure to moisture.

10.5 Incompatible materials

Never allow product to get in contact with water during storage. Water in the container will lead to increased pressure and risk of explosion. Strong oxidizing agents.

10.6 Hazardous decomposition products

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

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Unknown

Corrosivity: Unknown

Sensitization: Unknown

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
28182-81-2	HOMOPOLYMER OF HDI	5000 mg/kg, oral, rat		390 mg/m3, inhalation, rat
123-86-4	N-BUTYL ACETATE	10760 mg/kg, rat, oral	14112 mg/kg (rabbit)	21 mg/l/4/h, Inh. rat
64742-95-6	AROMATIC HYDROCARBON	4700 mg/kg, oral, rat		3670 ppm/8 hours, rat, inhalation
822-06-0	HEXAMETHYLENE DIISOCYANATE	710 mg/kg, oral rat		23 ppm / 4 hrs

Additional Information:

May be harmful if swallowed.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia): Unknown

IC50 72hr (Algae): Unknown

LC50 96hr (fish): Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
28182-81-2	HOMOPOLYMER OF HDI	No information	No information	No information
123-86-4	N-BUTYL ACETATE	44 mg/l (Daphnia magna)	674.7 mg/L (Green Algae)	18 mg/l (Fathead minnow)
64742-95-6	AROMATIC HYDROCARBON	No information	No information	No information
822-06-0	HEXAMETHYLENE DIISOCYANATE	No information	No information	No information

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1	UN number	UN 1263
14.2	UN proper shipping name	Paint
	Technical name	N/A
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	N/A
14.4	Packing group	III
14.5	Environmental hazards	Unknown
14.6	Special precautions for user	Unknown
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

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:

<u>Chemical Name</u>	<u>CAS-No.</u>
No TSCA 12(b) components exist in this product.	

U.S. Clean Air Act:

EPA Coating Category:
 EPA VOC Content Limit (g/l):
 Product VOC Content (g/l)
 Thinning Recommendations:
 Application Recommendations:
 Harmful if swallowed.

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.

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: As follows -*** Canadian DSL:**

No Information

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Reasons for revision

No Information

No Information