



Safety Data Sheet

Prepared in Accordance with HCS 29
C.F.R. 1910.1200

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

- 1.1 Product Identifier** 0856B1NL **Revision Date:** 02/15/2022
- Product Name:** URETHANE **Supersedes Date:** 12/06/2018
CONVERTER 811
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Hardener for 2 components coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
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 - regulatory@carboline.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 2
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, AROMATIC HYDROCARBON

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 2 | H411 | Toxic to aquatic life with long lasting effects. |

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. |
| P391 | Collect spillage. |
| P403+233 | Store in a well-ventilated place. Keep container tightly closed. |

2.3 Other hazards

No Information

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>Name According to EEC</u> | <u>EINEC No.</u> | <u>CAS-No.</u> | <u>%</u> | <u>Classifications</u> |
|------------------------------|------------------|----------------|----------|------------------------|
| HOMOPOLYMER OF HDI | 500-060-2 | 28182-81-2 | 75 - 100 | H317-332-335-411 |

| | | | | |
|----------------------------|-----------|------------|------------|----------------------------------|
| N-BUTYL ACETATE | 204-658-1 | 123-86-4 | 2.5 - <10 | H226-336 |
| AROMATIC HYDROCARBON | 265-199-0 | 64742-95-6 | 2.5 - <10 | H226-304-315-319-332-335-336-411 |
| HEXAMETHYLENE DIISOCYANATE | 212-485-8 | 822-06-0 | 0.1 - <1.0 | H302-315-317-319-330-334-335 |

| <u>CAS-No.</u> | <u>M-Factors</u> |
|----------------|------------------|
| 28182-81-2 | 0 |
| 123-86-4 | 0 |
| 64742-95-6 | 0 |
| 822-06-0 | 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.

When symptoms persist or in all cases of doubt seek medical advice.

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.

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

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

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

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

Prevent further leakage or spillage if safe to do so. 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

No 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 get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

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)

| <u>Name</u> | <u>CAS-No.</u> | <u>ACGIH TWA</u> | <u>ACGIH STEL</u> | <u>ACGIH Ceiling</u> |
|----------------------------|----------------|------------------|-------------------|----------------------|
| HOMOPOLYMER OF HDI | 28182-81-2 | N/E | N/E | N/E |
| N-BUTYL ACETATE | 123-86-4 | 50 PPM | 150 PPM | N/E |
| AROMATIC HYDROCARBON | 64742-95-6 | 300.0 PPM | N/E | N/E |
| HEXAMETHYLENE DIISOCYANATE | 822-06-0 | 0.005 PPM | N/E | N/E |

| <u>Name</u> | <u>CAS-No.</u> | <u>OSHA PEL</u> | <u>OSHA STEL</u> |
|--------------------|----------------|-------------------|-------------------|
| HOMOPOLYMER OF HDI | 28182-81-2 | N/E | N/E |
| N-BUTYL ACETATE | 123-86-4 | 710 MGM3, 150 PPM | 150 MGM3, 200 PPM |

| | | | |
|----------------------------|------------|-----------|-----|
| AROMATIC HYDROCARBON | 64742-95-6 | 500.0 PPM | N/E |
| HEXAMETHYLENE DIISOCYANATE | 822-06-0 | N/E | N/E |

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

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. Lightweight protective clothing

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

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 | N/D |
| pH | N/D |
| Melting point / freezing point (°C) | N/D |
| Boiling point/range (°C) | 262 F (128 C) - 262F (128C) |
| Flash Point (°C) | 127F (53C) |
| 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 SDS

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: Respiratory Sensitizer / Skin Sensitizer: category 1

Repeated dose toxicity: STOT Single exposure (Respiratory System): Category 3

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

STOT-single exposure: Unknown

STOT-repeated exposure: Unknown

Aspiration hazard: 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> | <u>Gas LC50</u> | <u>Dust/Mist LC50</u> |
|----------------|-------------------------------|---------------------------|-----------------------------|--|-----------------|-----------------------|
| 28182-81-2 | HOMOPOLYMER OF HDI | 5000 mg/kg, oral, rat | Not Available | 390 mg/m ³ , inhalation, rat | 0.000 | 0.000 |
| 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 | Not Available | 3670 ppm/8 hours, rat, inhalation | 0.000 | 0.000 |
| 822-06-0 | HEXAMETHYLENE DIISOCYANATE | 710 mg/kg, oral rat | >7000 mg/kg, dermal, rat | 23 ppm / 4 hrs | 0.000 | 0.000 |

Additional Information:

No Information

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 | >100 mg/l (Zebra Fish) | No information | >100 mg/l (Zebra Fish) |
| 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:

Flammable (gases, aerosols, liquids, or solids), Acute Toxicity (any route of exposure), Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

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> | <u>%</u> |
|----------------------------|----------------|----------|
| HEXAMETHYLENE DIISOCYANATE | 822-06-0 | 0.2 |

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

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: 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: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory (DSL)

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. |
| H304 | May be fatal if swallowed and enters airways. |
| 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

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.