

# Safety Data Sheet

## AY290310 LH310 Limco Urethane Hard ener - Normal

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(30373077/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

**AY290310 LH310 Limco Urethane Hard ener - Normal**

#### Recommended use of the chemical and restriction on use

Recommended use\*: for industrial use only

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Synonyms: Paint Related Material

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### 2. Hazards Identification

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

#### Classification of the product

Resp. Sens.	1	Respiratory sensitization
Skin Sens.	1	Skin sensitization
Flam. Liq.	3	Flammable liquids

#### Label elements

Pictogram:

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Signal Word:

Danger

Hazard Statement:

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements (Prevention):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P240	Ground and bond container and receiving equipment.
P285	In case of inadequate ventilation wear respiratory protection.
P233	Keep container tightly closed.
P243	Take action to prevent static discharges.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.

Precautionary Statements (Response):

P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P321	Specific treatment (see on this label).
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use water spray for extinction.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

Precautionary Statements (Storage):

P403 + P235	Store in a well-ventilated place. Keep cool.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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### Hazards not otherwise classified

No applicable information available.

## 3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
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822-06-0	$\geq 0.1 - < 0.2\%$	1,6-hexamethylene diisocyanate
28182-81-2	$\geq 75.0 - \leq 100.0\%$	Hexane, 1,6-diisocyanato-, homopolymer
110-43-0	$\geq 10.0 - < 15.0\%$	2-heptanone

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove contaminated clothing.

##### If inhaled:

Keep patient calm, remove to fresh air. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

##### If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

##### If in eyes:

Flush with copious amounts of water for at least 15 minutes. Hold eyelids open to facilitate rinsing. If irritation develops, seek medical attention. Seek medical attention.

##### If swallowed:

Immediate medical attention required. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Rinse mouth and then drink plenty of water.

#### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

#### Indication of any immediate medical attention and special treatment needed

##### Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:

carbon dioxide, foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

#### Special hazards arising from the substance or mixture

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Hazards during fire-fighting:

Vapors and/or decomposition products are irritant and/or toxic. If product is heated above decomposition temperature acrid smoke and fumes will be released.

### Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### Further information:

Avoid water contamination in closed containers of confined areas, because carbon dioxide gas is generated. Notify proper authorities. Do not flood burning material with water due to potential spreading of fire. Flash fire may occur. Run-off water from fire may cause pollution. Contain contaminated water/firefighting water. Remove product from areas of fire, or otherwise cool sealed containers with water in order to avoid pressure build up due to heat. Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Extinguish sources of ignition nearby and downwind. Avoid prolonged inhalation. Wear suitable personal protective clothing and equipment. Ensure adequate ventilation.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater.

A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities.

### Methods and material for containment and cleaning up

Dike spillage. Wash down spill area with decontamination solution. Spill area can be decontaminated with the following recommended decontamination solution: Allow solution to stand for at least 10 minutes. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours before sealing and disposing. Shovel into open container. Add additional decontamination solution to waste container. Mixture of 80 % water and 20 % non-ionic surfactant, or 90 - 95 % water, 3 - 8 % concentrated ammonia and 2 % detergent.

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## 7. Handling and Storage

### Precautions for safe handling

Handle and open container with care. Avoid water contamination in closed containers of confined areas, because carbon dioxide gas is generated. WARNING: Empty containers may still contain hazardous residue. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing. Do not reseal container if contamination of the product is suspected. Use static lines when mixing and transferring material. Do not puncture, drop, or slide containers. Store in a well-ventilated place. Keep cool. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing.

Proper ventilation and respiratory protection is required when sanding, flame cutting, welding or brazing coated surfaces. Do not apply to hot surfaces.

Protection against fire and explosion:

Risk of explosion if heated under confinement. Use antistatic tools. Exhaust fans should be explosion proof. Avoid all sources of ignition: heat, sparks, open flame. Provide adequate ventilation to remove

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solvent vapors from lower levels or work areas and to prevent solvent contact with ignition sources. Sealed containers should be protected against heat as this results in pressure build-up.

### Conditions for safe storage, including any incompatibilities

Segregate from strong bases. Segregate from oxidizing agents. Segregate from incompatible substances. Segregate from metals. Segregate from strong acids. Keep away from water.

Suitable materials for containers: Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container tightly closed. Protect against moisture. Carbon dioxide gas can cause containers to expand and possibly rupture explosively. Store protected against freezing. Protect from direct sunlight. If moisture enters isocyanate containers, CO<sub>2</sub> forms and pressure builds up.

Storage stability:

Storage temperature: 25 - 35 °C

Consult local fire marshal for storage requirements.

Slow non-hazardous polymerization possible when at or exceeding maximum temperatures.

Protect from temperatures above: 49 °C

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

2-heptanone	OSHA PEL	PEL 100 ppm 465 mg/m <sup>3</sup> ; TWA value 100 ppm 465 mg/m <sup>3</sup> ;
	ACGIH TLV	TWA value 50 ppm ;
1,6-hexamethylene diisocyanate	ACGIH TLV	TWA value 0.005 ppm ;

### Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

General mechanical ventilation should comply with OSHA 1910.94.

### Personal protective equipment

#### Respiratory protection:

Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

#### Hand protection:

Use appropriate chemically resistant gloves as determined by an evaluation of glove performance characteristics and the hazards and potential hazards identified, including but not limited to butyl, natural and synthetic rubber, nitrile, or neoprene.

#### Eye protection:

Wear face shield if splashing hazard exists. Tightly fitting safety goggles (chemical goggles).

#### Body protection:

Body protection must be chosen based on level of activity and exposure.

### General safety and hygiene measures:

Work place should be equipped with a shower and an eye wash. Consider the type of application and environmental concentrations to maintain the actual exposures below the established exposure limits. Employee education and training in the safe use and handling of isocyanates is required under

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the OSHA Communication Standard. Remove contaminated clothing. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Contact lenses should not be worn. Hands and/or face should be washed before breaks and at the end of the shift.

### 9. Physical and Chemical Properties

Form:	liquid	
Odour:	product specific	
Odour threshold:	No applicable information available.	
Colour:	No applicable information available.	
pH value:	No applicable information available.	
Melting point:	No applicable information available.	
Boiling point:	305.60 °F	
	152.00 °C	
Sublimation point:	No applicable information available.	
Flash point:	102.00 °F	(ASTM D3278)
	38.89 °C	(ASTM D3278)
Flammability:	No applicable information available.	
Lower explosion limit:	No applicable information available.	
Upper explosion limit:	No applicable information available.	
Autoignition:	No applicable information available.	
Vapour pressure:	No applicable information available.	
Density:	1.1009 g/cm3	(calculated)
	( 20 °C)	
	9.1878 lb/USg	(calculated)
Relative density:	1.1010	
	( 20 °C)	
Vapour density:	No applicable information available.	
Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.	
Thermal decomposition:	Risk of polymerization above the indicated temperature in the presence of moisture and isocyanate reactive substances. No applicable information available.	
Viscosity, dynamic:	No applicable information available.	
Viscosity, kinematic:	> 20.600 mm2/s	
Solubility in water:	Reacts with water.	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Evaporation rate:	No applicable information available.	

### 10. Stability and Reactivity

#### Reactivity

No applicable information available.

#### Chemical stability

The product is chemically stable.

#### Possibility of hazardous reactions

On contact with water, gaseous decomposition products are formed, which cause build-up of pressure in tightly closed containers. Reacts with water.

#### Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid direct contact with water. Avoid electrostatic discharge.

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### Incompatible materials

strong oxidizing agents, strong bases, strong acids, thiols, transition metal salts, water, amines, alcohols

### Hazardous decomposition products

Decomposition products:

nitrogen oxides, carbon dioxide, carbon monoxide, hydrogen cyanide

Thermal decomposition:

Risk of polymerization above the indicated temperature in the presence of moisture and isocyanate reactive substances. No applicable information available.

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

#### *Information on: 2-heptanone*

*Assessment of acute toxicity: Of moderate toxicity after short-term inhalation. Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact.*

#### *Information on: 1,6-hexamethylene diisocyanate*

*Assessment of acute toxicity: Of high toxicity after short-term inhalation. In animal studies the substance is virtually nontoxic after a single skin contact. Of moderate toxicity after single ingestion.*

#### Assessment other acute effects

No applicable information available.

#### Irritation / corrosion

Assessment of irritating effects: No applicable information available.

#### Sensitization

Assessment of sensitization: The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

#### *Information on: 1,6-hexamethylene diisocyanate*

*Assessment of sensitization:*

*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.*

#### Aspiration Hazard

No applicable information available.

### Chronic Toxicity/Effects

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### Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

### *Information on: 2-heptanone*

*Assessment of repeated dose toxicity: May affect the liver and kidneys as indicated in animal studies.*

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### Genetic toxicity

Assessment of mutagenicity: No applicable information available.

### Carcinogenicity

Assessment of carcinogenicity: No applicable information available.

### Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

### Teratogenicity

Assessment of teratogenicity: No applicable information available.

## Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

### Medical conditions aggravated by overexposure

Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended. The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing.

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## 12. Ecological Information

### **Additional information**

Other ecotoxicological advice:

Acutely toxic for aquatic organisms.

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## 13. Disposal considerations

### **Waste disposal of substance:**

Do not incinerate closed containers. The use and processing of this product, or addition of other constituents, may cause it to be considered a hazardous waste. Do not discharge into drains/surface waters/groundwater.

Incinerate or dispose of in a RCRA-licensed facility. Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

### **Container disposal:**

WARNING: Empty containers may still contain hazardous residue.



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Dispose of in accordance with national, state and local regulations.

### 14. Transport Information

#### Land transport

USDOT

Hazard class: 3  
Packing group: III  
ID number: UN 1263  
Hazard label: 3  
Proper shipping name: PAINT RELATED MATERIAL

#### Sea transport

IMDG

Hazard class: 3  
Packing group: III  
ID number: UN 1263  
Hazard label: 3  
Marine pollutant: NO  
Proper shipping name: PAINT RELATED MATERIAL

#### Air transport

IATA/ICAO

Hazard class: 3  
Packing group: III  
ID number: UN 1263  
Hazard label: 3  
Proper shipping name: PAINT RELATED MATERIAL

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

#### State regulations

##### State RTK

NJ  
PA

##### CAS Number

110-43-0  
110-43-0

##### Chemical name

2-heptanone  
2-heptanone

##### NFPA Hazard codes:

Health: 2 Fire: 2 Reactivity: 0 Special:

##### HMIS III rating

Health: 2 $\alpha$  Flammability: 2 Physical hazard: 0

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### 16. Other Information

**SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2018/06/23

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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