

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/23/2019 Version: 1.0

## **SECTION 1: Identification**

#### Identification

: UR7001 Clear B Product name

#### 1.2. Recommended use and restrictions on use

Recommended use : Isocyanates

Restrictions on use : Product for industrial use only

#### Supplier 1.3.

ResinLab. LLC

N109 W13300 Ellsworth Drive

Germantown, WI 53022 - United States

T 1-877-259-1669

msds@resinlab.com - www.resinlab.com

#### 1.4. **Emergency telephone number**

**Emergency number** : CHEMTREC:1-800-424-9300 (USA); +1 703-527-3887 (International)

# **SECTION 2: Hazard(s) identification**

#### Classification of the substance or mixture 2.1.

#### **GHS US classification**

Acute toxicity (inhal.), Category 4 H332 Harmful if inhaled.

Skin sensitisation, Category 1 H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

Specific target organ toxicity — Single exposure, Category 3,

Respiratory tract irritation

Full text of H statements : see section 16

## GHS Label elements, including precautionary statements

#### **GHS US labelling**

Hazard pictograms (GHS US)



Signal word (GHS US) Warning

Hazard statements (GHS US) H317 - May cause an allergic skin reaction.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. Precautionary statements (GHS US)

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - If on skin: Wash with plenty of water/...

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P312 - Call a poison center/doctor/... if you feel unwell

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

: Possible sensitizer, reacts with common materials such as water and alcohols releasing CO2.

# **Unknown acute toxicity (GHS US)**

Not applicable

## **SECTION 3: Composition/information on ingredients**

## **Substances**

Not applicable

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#### 3.2 **Mixtures**

Name	Product identifier	%	GHS US classification
Hexamethylene diisocyanate homopolymer	(CAS-No.) 28182-81-2	>= 75	Acute Tox. 4 (Inhalation), H332 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Sens. 1, H317 STOT SE 3, H335
1,6-diisocyanatohexane	(CAS-No.) 822-06-0	0.1 - 0.5	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Inhalation:vapour), H331 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

## **SECTION 4: First-aid measures**

#### 4.1. **Description of first aid measures**

: Call a poison center or a doctor if you feel unwell. First-aid measures general

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a First-aid measures after inhalation

doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. If available apply a polyglycol based cleanser or corn oil and

then wash with soap and water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. First-aid measures after eye contact

Continue rinsing. If eye irritation persists: Get medical advice/attention.

: Call a poison center or a doctor if you feel unwell. First-aid measures after ingestion

#### Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : May cause an allergic skin reaction.

## Immediate medical attention and special treatment, if necessary

Treat symptomatically. Diisocyanate vapors or mist concentrations above the PEL or TLV can irritate the respiratory tract causing runny nose, sore throat, coughing, chest discomfort, shortness of breath. Persons with pre-existing non specific bronchial hyperactivity can respond to concentrations below the OEL. These symptoms can be delayed to several hours after exposure and are reversible.

# **SECTION 5: Fire-fighting measures**

## Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide.

Water may be used if no other available and then in copious quantities. Reaction between Unsuitable extinguishing media

water and hot isocyanate may be vigorous.

## Specific hazards arising from the chemical

Reactivity in case of fire : Carbon dioxide (CO2). Nitrogen oxides.

## Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with **Emergency procedures** 

skin and eyes.

#### 6.1.2. For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

#### 6.2. **Environmental precautions**

Avoid release to the environment.

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## 6.3. Methods and material for containment and cleaning up

For containment : Pump free liquid into closed but not sealed container to allow for escape of CO2. Absorb with

liquid binding material. Wash area with large amounts of water.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Additional hazards when processed : When using a spray gun or other means to aerosolize the material, respiratory protection is

required.

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective

equipment.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated

clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

Hexamethylene diisocyanate homopolymer (28182-81-2)		
Not applicable		
1,6-diisocyanatohexane (822-06-0)		
ACGIH	Local name	Hexamethylene diisocyanate
ACGIH	ACGIH TWA (ppm)	0.005 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT irr; resp sens. Notations: BEI
ACGIH	Regulatory reference	ACGIH 2019

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

## 8.3. Individual protection measures/Personal protective equipment

# Hand protection:

Protective gloves

# Eye protection:

Safety glasses with side shields

## Skin and body protection:

Wear suitable protective clothing

## Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. When using a spray gun or other means to aerosolize the material, respiratory protection is required.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colorless to yellow

Odour : odourless

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Odour threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : > 220 °C

Flash point : 228 °C

Relative evaporation rate (butylacetate=1) : No data available

Flammability (solid, gas) : Not applicable.

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 1.16 g/cm³

Solubility : No data available Log Pow : No data available

Auto-ignition temperature : 460 °C

Decomposition temperature : No data available Viscosity, dynamic : No data available Explosive limits : No data available Explosive properties : No data available Oxidising properties : No data available : No data available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

# 10.5. Incompatible materials

Amines. alcohols. Strong bases. Solvents.

# 10.6. Hazardous decomposition products

Nitrogen oxides. Carbon oxides (CO, CO2).

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Harmful if inhaled. Not classified.

ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

Hexamethylene diisocyanate homopolymer (28182-81-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 15800 mg/kg
LC50 inhalation rat (mg/l)	0.402 mg/l/4h
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	0.402 mg/l/4h
ATE US (dust,mist)	0.402 mg/l/4h

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1,6-diisocyanatohexane (822-06-0)	
LD50 oral rat	746 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 7000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	0.124 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value Inhalation (vapours), 28 day(s))
ATE US (oral)	746 mg/kg bodyweight
ATE US (gases)	100 ppmv/4h
ATE US (vapours)	0.124 mg/l/4h
ATE US (dust,mist)	0.124 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
5	A1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (

Respiratory or skin sensitisation : Not classified. May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Hexamethylene diisocyanate homopolyme	cyanate homopolymer (28182-81-2)	
STOT-single exposure	May cause respiratory irritation.	
1,6-diisocyanatohexane (822-06-0)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Symptoms/effects after inhalation	: May cause respiratory irritation.	
Symptoms/effects after skin contact	: May cause an allergic skin reaction.	

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

# 12.2. Persistence and degradability

1,6-diisocyanatohexane (822-06-0)	
Persistence and degradability	Not readily biodegradable in water.

# 12.3. Bioaccumulative potential

1,6-diisocyanatohexane (822-06-0)	
BCF fish 1	59.6 (BCFWIN, Pisces, QSAR)
Log Pow	3.2 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

# 12.4. Mobility in soil

1,6-diisocyanatohexane (822-06-0)	
Log Koc	2.78 - 3.68 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil.

## 12.5. Other adverse effects

No additional information available

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## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## **SECTION 14: Transport information**

## **Department of Transportation (DOT)**

In accordance with DOT

Not regulated

## **Transportation of Dangerous Goods**

Not regulated

## Transport by sea

Not regulated

## Air transport

Not regulated

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

# Hexamethylene diisocyanate homopolymer (28182-81-2)

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

### 1,6-diisocyanatohexane (822-06-0)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 100 lb

# 15.2. International regulations

## **CANADA**

## Hexamethylene diisocyanate homopolymer (28182-81-2)

Listed on the Canadian DSL (Domestic Substances List)

## 1,6-diisocyanatohexane (822-06-0)

Listed on the Canadian DSL (Domestic Substances List)

## **EU-Regulations**

Contains no substance on the REACH candidate list

# **National regulations**

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
1,6-diisocyanatohexane(822-06-0)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List

# **SECTION 16: Other information**

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## Full text of H-statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

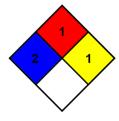
temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can

occur.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can

become unstable at elevated temperatures and pressures.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous

polymerization in the absence of inhibitors.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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