

# SAFETY DATA SHEET

Revision Date 09-Jul-2019

Version 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** URETHANE HARDENER

### Other means of identification

**Product Code** KH2012-HP  
**SKU(s)** KH2012-HP, KH2012-QT

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

**Recommended Use** No information available.  
**Uses advised against** No information available

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

#### **Supplier Address**

Custom Shop  
6695 Rasha St.  
San Diego, CA 92121  
Phone: (858) 909-2110

### Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 3

### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause an allergic skin reaction  
May cause respiratory irritation. May cause drowsiness or dizziness  
Flammable liquid and vapor



**Appearance** No information available

**Physical state** Liquid

**Odor** No information available

#### **Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray  
In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Keep cool  
 Use explosion-proof electrical/ ventilating/ lighting/ equipment

If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

- May be harmful if swallowed
- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown acute toxicity                      0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%	Trade Secret
Parachlorobenzotrifluoride	98-56-6	30 - 60	*
Polymeric Isocyanate	28182-81-2	15 - 40	*
Ethyl 3-Ethoxypropionate	763-69-9	5 - 10	*
Butyl Acetate	123-86-4	3 - 7	*
Methyl Amyl Ketone	110-43-0	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact**                      Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin Contact**                     In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse.

**Inhalation**                         May cause allergic respiratory reaction.

**Ingestion**                         Clean mouth with water and drink afterwards plenty of water.

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

**Symptoms**                         May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause

allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

May cause sensitization by inhalation and skin contact. Treat symptomatically. Symptoms may be delayed.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

Flammable.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

Remove all sources of ignition. Use personal protective equipment as required.

**Environmental precautions****Environmental precautions**

Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up****Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Soak up with inert absorbent material.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials**

Incompatible with oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Parachlorobenzotrifluoride 98-56-6	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F (vacated) TWA: 2.5 mg/m <sup>3</sup>	IDLH: 250 mg/m <sup>3</sup> F
Butyl Acetate 123-86-4	STEL: 150 ppm TWA: 50 ppm	TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> (vacated) TWA: 150 ppm (vacated) TWA: 710 mg/m <sup>3</sup> (vacated) STEL: 200 ppm (vacated) STEL: 950 mg/m <sup>3</sup>	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> STEL: 200 ppm STEL: 950 mg/m <sup>3</sup>
Methyl Amyl Ketone 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 465 mg/m <sup>3</sup>	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** No special technical protective measures are necessary.

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	No information available
<b>Appearance</b>	No information available	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No information available	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	>= 118 °C / 244 °F	
<b>Flash point</b>	43 °C / 109 °F	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	1.17	
<b>Water solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	

<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>Liquid Density</b>	9.75 lbs/gal
<b>Bulk density</b>	No information available
<b>Percent solids by weight</b>	37.2%
<b>Percent volatile by weight</b>	18.5%
<b>Percent solids by volume</b>	37.2%
<b>Actual VOC (lbs/gal)</b>	1.8
<b>Actual VOC (grams/liter)</b>	216
<b>EPA VOC (lbs/gal)</b>	2.9
<b>EPA VOC (grams/liter)</b>	351.5
<b>EPA VOC (lb/gal solids)</b>	4.8

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

Incompatible with oxidizing agents.

**Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause sensitization by inhalation.
<b>Eye contact</b>	May cause irritation.
<b>Skin Contact</b>	May cause irritation. May cause sensitization by skin contact.
<b>Ingestion</b>	No data available.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Parachlorobenzotrifluoride 98-56-6	= 13 g/kg ( Rat )	> 2 mL/kg ( Rabbit )	= 33 mg/L ( Rat ) 4 h
Polymeric Isocyanate 28182-81-2	-	-	= 18500 mg/m <sup>3</sup> ( Rat ) 1 h
Ethyl 3-Ethoxypropionate 763-69-9	= 5 g/kg ( Rat )	> 9500 mg/kg ( Rabbit ) = 10 mL/kg ( Rabbit )	> 5.96 mg/L ( Rat ) 6 h
Butyl Acetate	= 10768 mg/kg ( Rat )	> 17600 mg/kg ( Rabbit )	= 390 ppm ( Rat ) 4 h

123-86-4			
Methyl Amyl Ketone 110-43-0	= 1600 mg/kg ( Rat ) = 1670 mg/kg ( Rat )	= 12.6 mL/kg ( Rabbit ) = 12600 µL/kg ( Rabbit )	2000 - 4000 ppm ( Rat ) 6 h

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause sensitization by inhalation and skin contact.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.  
**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target organ effects** Central nervous system, Eyes, Peripheral Nervous System (PNS), Respiratory system, Skin.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects

37.2% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Parachlorobenzotrifluoride 98-56-6	-	11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static	3.68: 48 h Daphnia magna mg/L EC50
Ethyl 3-Ethoxypropionate 763-69-9	-	62: 96 h Pimephales promelas mg/L LC50 static	970: 48 h Daphnia magna mg/L EC50
Butyl Acetate 123-86-4	674.7: 72 h Desmodosmus subspicatus mg/L EC50	100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through 62: 96 h Leuciscus idus mg/L LC50 static	72.8: 24 h Daphnia magna mg/L EC50
Methyl Amyl Ketone 110-43-0	-	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical name	Partition coefficient
Parachlorobenzotrifluoride 98-56-6	3.7
Ethyl 3-Ethoxypropionate 763-69-9	1.35
Butyl Acetate 123-86-4	1.81
Methyl Amyl Ketone 110-43-0	1.98

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Butyl Acetate 123-86-4	Toxic

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No

Fire hazard Yes  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Butyl Acetate 123-86-4	5000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Butyl Acetate 123-86-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts
Parachlorobenzotrifluoride 98-56-6	X	-
Butyl Acetate 123-86-4	X	X
Methyl Amyl Ketone 110-43-0	X	X

Chemical name	Pennsylvania
Butyl Acetate 123-86-4	X
Methyl Amyl Ketone 110-43-0	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**Hazardous air pollutants (HAPS) content**

This product contains no Hazardous Air Pollutants individually at 1% by weight, or greater.

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

**NFPA** Health hazards 2 Flammability 2 Instability 0 Physical and chemical properties -  
**HMIS** Health hazards 2 \* Flammability 2 Physical hazards 0 Personal protection X  
*Chronic Hazard Star Legend \* = Chronic Health Hazard*

Revision Date 09-Jul-2019

Revision Note  
 No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate



protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

**End of Safety Data Sheet**