# SOLUTIONS

**SAFETY DATA SHEET** 

Revision Date: August 11 2021

PRODUCT: URETHANE REDUCER - MEDIUM

#### **SECTION 01: Chemical product and company identification**

**SECTION 02: Hazards identification** 



Signal Word Hazard Classification	DANGER. Flammable Liquid 2. Aspiration Toxicity 1. Skin Irritant 2. Eye Irritant 2. Single Target Organ Toxicity - Single Exposure 3. (respiratory system). (narcotic effects). Reproductive 2. STOT RE 2.
Hazard Description	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361 This product contains ingredients that are suspected of damaging fertility or the unborn child. H373 May cause
Prevention	damage to the liver and kidneys through prolonged or repeated contact. P201 Obtain special instructions before use. P202 Do not handle this product until all safety instructions have been read and understood. P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves and eye protection. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well ventilated area. P260 Do not breathe
Response	mist, vapours, or spray. P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower . P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P331 Do NOT induce vomiting. P302 + P352 - If on skin: wash with plenty of water P321 - For specific treatment see section 4 on this SDS. P332 + P313 - If skin irritation occurs get medical attention or advice. P362 + P364 - Take off contaminated clothing and wash before reuse. P305 + P351 + P338 If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until medical help arrives. P337 + P313 - If eye irritation persists get medical attention. P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor if you feel unwell. P308 + P313 If exposed or concerned, get medical advice/attention.
Storage	P403 + P235 Store in well ventilated area. Keep cool. P405 Store locked up. P233 Keep container tightly closed.
Disposal Note	P501 Dispose all unused, waste or empty containers in accordance with local regulations. This product mixture has been classified based on its ingredients.

**SECTION 03: Composition/Information on Ingredients** 

HAZARDOUS INGREDIENTS	CAS#	WT. %
Acetone 1,2-dimethylbenzene; 1,3-dimethylbenzene; 1,4-dimethylbenzene t-Butyl Acetate Methyl Isobutyl Ketone	67-64-1 1330-20-7 540-88-5 108-10-1	10-40 20-25 30-35 20-25

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

#### **SECTION 04: First aid measures**

Eye contact	In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Obtain medical attention.
Skin contact	Remove all contaminated clothing and immediately wash the exposed areas with copious amounts of water for a minimum of 30 minutes or up to 60 minutes for critical body areas. If
	irritation persists, seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is
	difficult, give oxygen, obtain medical attention.
Ingestion	Do not induce vomiting. If ingestion is suspected, contact physician or poison control center
·	immediately. If spontaneous vomiting occurs have victim lean forward with head down to
	prevent aspiration of fluid into the lungs. Never give anything by mouth to an unconscious
	person.
Most important symptoms and effects,	Harmful if swallowed, in contact with skin or if inhaled. Causes skin and eye irritation. May
whether acute or delayed	cause respiratory irritation. Vapors have a narcotic effect and may cause headache,
•	fatigue, dizziness and nausea. May damage fertility or the unborn child.
Additional information	Treat victims symptomatically. The main hazard from ingestion is aspiration of the liquid
	into the lungs producing chemical pneumonitis. In the event of an incident involving this
	product ensure that medical authorities are provided a copy of this safety data sheet.

#### **SECTION 05: Fire fighting measures**

Suitable and unsuitable extinguish	າເກg	media	" <i>F</i>
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"Alcohol" foam, CO2, dry chemical. In cases of larger fires, water spray should be used. Do not use water in a jet.

Hazardous combustion products...... Special fire fighting procedures..... Oxides of carbon (CO, CO2). Hydrocarbon fumes and smoke.

Firefighter should be equipped with self-contained breathing apparatus and full protective clothing to protect against potentially toxic and irritating fumes. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture. Solvent vapours may be heavier than air and may build up and travel along the ground to an ignition source, which may result in a flash back to the source of the vapours. Keep run-off water from entering sewers and other waterways. Dike for water control.

#### **SECTION 06: Accidental release measures**

Ventilate. Eliminate all sources of ignition. Contain the spill. Avoid all personal contact. Evacuate all non-essential personnel. Prevent runoff into drains, sewers, and other waterways. Absorb with earth, sand, or another dry inert material. Shovel into suitable unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution: mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%); or water (90%), concentrated ammonia (3-8%) and detergent (2%). Spilled material and water rinses are classified as chemical waste, and must be disposed of in accordance with current local, provincial, state, and federal regulations.

#### **SECTION 07: Handling and storage**

Handling procedures	Keep away from heat, sparks, and open flame. Always adopt precautionary measures
9 F	against build-up of static which may arise from appliances, handling and the containers in
	which product is packed. Ground handling equipment. Avoid all skin contact and ventilate
	adequately, otherwise wear an appropriate breathing apparatus. Avoid breathing vapours
	or mist. Handle and open container with care. Employees should wash hands and face
	before eating or drinking.

#### **SECTION 08: Exposure controls / personal protection**

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# Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Acetone  1,2-dimethylbenzene; 1,3-dimethylbenzene; 1,4-dimethylbenzene	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1200 mg/m³ 8 hours. 15 min OEL: 7500 ppm 8 hours. 15 min OEL: 7500 ppm 15 minutes. CA British Columbia Provincial (Canada, 5/2015).  TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015).  TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014).  TWAEV: 500 ppm 8 hours. STEV: 1900 ppm 15 minutes. STEV: 1900 ppm 15 minutes. STEV: 2380 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 750 ppm 15 minutes. TWA: 500 ppm 8 hours.  TWA: 500 ppm 8 hours.  CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 300 ppm 15 minutes. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2019).  TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. STEV: 150 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 150 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 1/2013). STEL: 150 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 1/2013). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.

t-butyl acetate

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 950 mg/m³ 8 hours. CA British Columbia Provincial

(Canada,1/2020). TWA: 200 ppm 8 hours.

CA Quebec Provincial (Canada, 7/2019).

TWAEV: 200 ppm 8 hours. TWAEV: 950 mg/m<sup>3</sup> 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 250 ppm 15 minutes. TWA: 200 ppm 8 hours.

CA Ontario Provincial (Canada, 6/2019).

STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.

Methyl isobutyl ketone

#### CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 205 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. 15 min OEL: 75 ppm 15 minutes. 15 min OEL: 307 mg/m³ 15 minutes.

CA British Columbia Provincial (Canada, 5/2019).

TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes.

CA Ontario Provincial (Canada, 1/2018).

TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 50 ppm 8 hours. TWAEV: 205 mg/m³ 8 hours. STEV: 75 ppm 15 minutes. STEV: 307 mg/m³ 15 minutes.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours.

# Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

#### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

#### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

#### **SECTION 09: Physical and chemical properties**

Physical state	Liquid.
Colour	Clear, colourless.
Odour	Solvent odour.
Odour threshold (ppm)	Not available.
pH	Not applicable.
Melting / Freezing point (deg C)	< -50 C. (estimate).
Initial boiling point / boiling range (deg C)	>79.
Flash point (deg C), method	<ul><li>-9. (estimated).</li></ul>
Evaporation rate	Not available.
Flammability (solids and gases)	Not applicable.
Upper flammable limit (% vol)	11.5.
Lower flammable limit (% vol)	0.9.
Vapour pressure (mm Hg)	>3.7 mmHg.
Vapour density (air=1)	>1.
Relative Density (Specific Gravity)	6.99 lb/usg - 0.839 g/mL.
Solubility	0 0
Coefficient of water\oil distribution	Not available.
Auto ignition temperature (deg C)	> 320.
Decomposition temperature	Not available.
Viscosity	13.2 sec Zahn #2.
% Volatile by volume	100.
VOC	373 g/L.
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#### SECTION 10: Stability and reactivity

Chemical stability	Stable at normal temperatures and pressures.
Reactivity	Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong
	oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Keep away from heat. Incompatible with strong oxidizers.
Hazardous decomposition products	By fire: Oxides of carbon (CO CO2). Dense black smoke

### **SECTION 11: Toxicological information**

INGREDIENTS	LC50	LD50

#### **SECTION 11: Toxicological information**

INGREDIENTS Acetone	LC50	LD50
1,2-dimethylbenzene; 1,3-dimethylbenzene; 1,4-dimethylbenzene	Not Available  Not Available	Oral Rat 5800 mg/kg (rat oral)
t-butyl acetate	Not Available	4100 mg/kg (rat oral)

Route of exposure..... Eye contact. Skin contact. Inhalation. Skin contact..... Can cause moderate irritation, defatting and dermatitis. Skin absorption..... May be harmful if absorbed through the skin. Can cause redness, irritation, tissue destruction. Eye contact..... Excessive inhalation of vapours can cause respiratory irritation, dizziness, headache, Inhalation (acute)..... vomiting and unconsciousness. Chronic exposure to organic solvent vapors have been associated with various neurotoxic effects including permanent brain and/or nervous system damage, kidney, liver, blood Inhalation (chronic)..... damage and reproductive effects among women. Symptoms may include nausea, vomiting, abdominal pain, headache, impaired memory, loss of coordination, insomnia and breathing difficulties. pneumonitis which can be fatal. Breathing high concentrations of vapour may cause anesthetic effects and serious health Effects of chronic exposure..... effects. Prolonged or repeated skin contact may cause drying or cracking of skin. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Carcinogenicity of material..... None known. Toluene is fetotoxic in rats and mice at maternally toxic levels. Prolonged and repeated exposure of pregnant animals (>1500 ppm) to Toluene have been reported to cause Reproductive effects..... adverse fetal developmental effects. Toluene is known by the State of California to cause adverse fetal developmental effects. In one study, Methyl Ethyl Ketone has been found to

#### **SECTION 12: Ecological information**

#### **SECTION 13: Disposal considerations**

cause embryol toxicity in large concentrations.

## **SECTION 14: Transport information**

2, 2014) - we certify that classification of this product is correct. .

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# **SECTION 15: Regulatory information**

40CFR63

## **SECTION 15: Regulatory information**

CEPA status	This product is considered hazardous under the OSHA Hazard Communication Standard.
Section 311/312 - hazard categories Section 313 EPA hazardous air pollutants (HAPS) 40CFR63	
California Proposition 65	This product does not contain any chemical(s) known to the State of California to cause

#### **SECTION 16: Other information**

Prepared by: ..... REGULATORY AFFAIRS.

DISCLAIMER: All information appearing herein is based upon data obtained from experience and recognized technical sources. To the best of our knowledge, it is believed to be correct as of the date of issue but we make no representations as to its accuracy or Disclaimer:.... sufficiency and do not suggest or guarantee that any hazards listed herein are the only ones which exist. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. The information relates only to the product designated herein, and does not

relate to its use in combination with any other material or in any other process.

AUG 11/2021 Revision date: .....