

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION

OSTREM CHEMICAL CO. LTD.  
2310 - 80 AVENUE  
EDMONTON AB T6P 1N2

Phone: 780-440-1911 or 780-446-0177  
In Case of Emergency Only:  
phone CANUTEC at (613) 996-6666

**Product name:** ULTRASOLVE H.D.

Code: I334

**Other name:**

**Distributed by:**

**Product use:** degreaser

**Date completed:** April 01, 2014

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
d-limonene	15-40	5989-27-5
ethylene glycol monobutyl ether	5-10	111-76-2
diethylene glycol monoethyl ether	7-13	111-90-0

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### 3. HAZARDS IDENTIFICATION

Combustible liquid. Eye irritant. Harmful if swallowed.

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### 4. FIRST AID MEASURES

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Induce vomiting only on the direct advice of a poison control centre. Get medical attention.

**Eye contact:** Flush with plenty of water for at least 15 minutes. Get medical attention.

**Skin contact:** Remove contaminated clothing and flush with plenty of water.

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### 5. FIRE - FIGHTING MEASURES

**Flash point (test method):** 48C (TCC)

**Flammable limits (%):** Not available

**Lower:** Not available

**Upper:** Not available

**Fire extinguishing substances:** carbon dioxide, foam or dry chemical

**Autoignition temperatures:** 458F/237C

**Hazardous combustion products:** May liberate carbon monoxide and carbon dioxide.

**Explosion data:**

**Sensitivity to mechanical impact:** Not available

**Sensitivity to static discharge:** Not available

**Special firefighting procedures:** As for surrounding fire. Fire fighters should wear full protective clothing and self contained breathing equipment.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear appropriate protective equipment.

**Environmental precautions:** Prevent from entering sewers, waterways or low areas.

**Methods for cleaning up:** Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

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## 7. HANDLING AND STORAGE

**Handling:** Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.  
**Storage:** Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** Provide exhaust ventilation to keep airborne levels below recommended exposure limits.  
**Respiratory protection:** If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator  
**Eye protection:** Chemical goggles. Wear a face shield if splashing hazards exists.  
**Other protection:** Wear protective clothing as necessary to prevent skin contact.

### Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
d-limonene	Not available		
ethylene glycol monobutyl ether	20 ppm TWA		
diethylene glycol monoethyl ether	Not available		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Solubility in water:</b> soluble
<b>Boiling point:</b> Not available	<b>Vapour pressure:</b> Not available
<b>Vapour density:</b> Not available	<b>Evaporation rate:</b> Not available
<b>Freezing point:</b> Not available	<b>Odour threshold:</b> Not available
<b>Sp. Gravity:</b> 0.961	<b>pH:</b> 8.7
<b>Appearance &amp; odour:</b> clear yellow liquid with citrus odour	

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Conditions of instability:** keep away from heat, sparks and flame  
**Incompatibility:** ( ) Water (X) Oxidizers (X) Acid ( ) Base ( ) Other  
**Conditions of reactivity:** Not available  
**Hazardous decomposition products:** Not available

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## 11. TOXICOLOGICAL PROPERTIES

### POTENTIAL ACUTE HEALTH EFFECTS

**Inhalation:** Irritating to respiratory system.  
**Ingestion:** Swallowing small amounts of this material is not likely to cause harmful effects. Large amounts may cause stomach and intestinal irritation, abdominal pain and vomiting.  
**Eye contact:** May cause mild to severe irritation such as stinging, tearing, redness and swelling of the eyes.  
**Skin contact:** May cause skin irritation.  
**Skin absorption:** Not applicable

### POTENTIAL CHRONIC HEALTH EFFECTS:

**Inhalation:** No known significant effects.  
**Ingestion:** Not available  
**Eye contact:** Not available  
**Skin contact:** Not applicable  
**Skin absorption:** Not applicable  
Prolonged overexposure to high concentrations of ethylene glycol monobutyl ether by

absorption, ingestion and inhalation has caused blood, liver and kidney effects in laboratory animals.

<b>Irritancy of product:</b>	See WHMIS criteria
<b>Sensitization of product:</b>	Not available
<b>Carcinogenicity:</b> IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
<b>Reproductive toxicity:</b>	No known significant effects.
<b>Teratogenicity:</b>	No known significant effects.
<b>Mutagenicity:</b>	No known significant effects.
<b>Synergistic product:</b>	Not available

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
d-limonene	5989-27-5	LD <sub>50</sub> Oral (rat) 4400 mg/kg LD <sub>50</sub> Dermal (rabbit) 5000 mg/kg
ethylene glycol monobutyl ether	111-76-2	LD <sub>50</sub> Oral (rat) 1480 mg/kg LD <sub>50</sub> Dermal (rabbit) 630 mg/kg
diethylene glycol monoethyl ether	111-90-0	LD <sub>50</sub> Oral (rat) 1920 mg/kg LD <sub>50</sub> Dermal (rabbit) 4200 uL/kg

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** Not available  
**Other information:**

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## 13. DISPOSAL CONSIDERATIONS

**Waste disposal:** Disposal of all waste must be done according to local, provincial and federal regulations.

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## 14. TRANSPORT INFORMATION

**TDG classification:** In amounts over 450 L: FLAMMABLE LIQUID, N.O.S.  
(D-LIMONENE); Class 3; UN 1993; PG III  
Not regulated in amounts less than 450 L.

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## 15. REGULATORY INFORMATION

**WHMIS:** B3 Combustible Liquid  
D2B Toxic Material Causing Other Effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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## 16. PREPARATION INFORMATION

**Prepared by:** Technical Services Department, Ostrem Chemical Co. Ltd., Ph: (780) 440-1911