

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: LIQUID CARPET CLEANER
Other name: Calclean 14
Distributed by: Caltech Tech Services
Product use: ultrasonic cleaners
Date completed: 13-Jul-2011

Code: J820

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
Ethylene glycol monobutyl ether	1-5	111-76-2

3. HAZARDS IDENTIFICATION

Eye irritant. Harmful if swallowed.

4. FIRST AID MEASURES

Inhalation: Remove from exposure. Get fresh air.
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.

5. FIRE - FIGHTING MEASURES

Flash point (test method): Not applicable
Flammable limits (%): Non-flammable
Lower: Not applicable
Upper: Not applicable
Fire extinguishing substances: Use extinguishing media appropriate for surrounding fire.
Autoignition temperatures: Not applicable
Hazardous combustion products: May liberate carbon monoxide, carbon dioxide and oxides of sodium.
Explosion data:
Sensitivity to mechanical impact: Not applicable
Sensitivity to static discharge: Not applicable
Special firefighting procedures: As for surrounding fire.

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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Special ventilation requirements not normally necessary
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
Ethylene glycol monobutyl ether	20 ppm TWA	Not available	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Solubility in water: Complete
Boiling point: 100C	Vapour pressure: Not available
Vapour density: Not available	Evaporation rate: Not available
Freezing point: Not available	Odour threshold: Not available
Sp. Gravity: 1.029	pH: 8.9; 1% solution: 8.1
Appearance & odour: green liquid with lemon fragrance	

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions of instability: Not available
Incompatibility: () Water (X) Oxidizers (X) Acid () Base () Other
Conditions of reactivity: Not available
Hazardous decomposition products: Not available

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 available

POTENTIAL CHRONIC HEALTH EFFECTS:

Inhalation: Repeat or prolonged exposure may cause damage to lungs.
Ingestion: Not available
Eye contact: Not available
Skin contact: Not available
Skin absorption: Not available
 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.

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

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
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Ethylene glycol monobutyl ether

111-76-2

LD₅₀ Oral (rat) 1480 mg/kg

LD₅₀ Dermal(rabbit) 630 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicological information: Not available

Other information:

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG classification: Not regulated

15. REGULATORY INFORMATION

WHMIS: D2B Other toxic 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.

16. PREPARATION INFORMATION

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