

## 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:** JET CLEAN PLUS

Code: A259

**Other name:**

**Distributed by:**

**Product use:** Detergent

**Date completed:** April 01, 2014

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
Ethylene glycol monobutyl ether	3-7	111-76-2

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### 3. HAZARDS IDENTIFICATION

Eye irritant. Harmful if swallowed.

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### 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.

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### 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.

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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.

## 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	

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Solubility in water:</b> Complete
<b>Boiling point:</b> 100C	<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> 1.079	<b>pH:</b> 10.7 - 1% sol.: 10.1
<b>Appearance &amp; odour:</b>	Amber orange liquid with butyl odour

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## 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

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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 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.

<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  
Ethylene glycol monobutyl ether

CAS NO.  
111-76-2

TOXICITY DATA  
LD<sub>50</sub> Oral (rat) 1480 mg/kg  
LD<sub>50</sub> Dermal(rabbit) 630 mg/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: Not regulated

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## 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.

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## 16. PREPARATION INFORMATION

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