

## 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:** MP-50 IMMERSION CLEANER

Code: I324

**Other name:**

**Distributed by:**

**Product use:** immersion cleaner

**Date completed:** April 6, 2015

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
oxalic acid (neutralized)	1-5	144-62-7
triethanolamine 85%	1-5	102-71-6
methyl pyrrolidinone	15-40	872-50-4

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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 15 minutes. Get medical attention if irritation persists.

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

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### 5. FIRE - FIGHTING MEASURES

**Flash point (test method):** Not available

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

**Lower:** Not available

**Upper:** Not available

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

**Autoignition temperatures:** Not available

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

**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.

## 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
oxalic acid	TLV-1 mg/m <sup>3</sup>		
triethanolamine	5mg/m <sup>3</sup> TLV-TWA		
methyl pyrrolidinone	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> 1.043	<b>pH:</b> 10
<b>Appearance &amp; odour:</b>	colourless liquid with mild pine 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:** May be harmful if swallowed.  
**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

<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.

**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
oxalic acid	144-62-7	LD <sub>50</sub> Oral (rat) 375 mg/kg LD <sub>LO</sub> Oral (human) 71 mg/kg
triethanolamine	102-71-6	LD <sub>50</sub> Oral (rat) 4190 mg/kg LD <sub>50</sub> Dermal (rabbit) 2000 mg/kg
methyl pyrrolidinone	872-50-4	LD <sub>50</sub> Oral (rat) 3598 mg/kg LD <sub>50</sub> Dermal (rabbit) 2000 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:** CORROSIVE LIQUID, N.O.S. (oxalic acid), UN 1760, Class 8 PG III

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## 15. REGULATORY INFORMATION

**WHMIS:** 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