

## 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:** COOLING WATER COMPOUND A.I.R. Code: S754  
**Other name:**  
**Distributed by:**  
**Product use:** cooling water treatment - compliant with Alberta Infrastructure Regulations  
**Date completed:** April 16, 2014

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
methylene phosphonic acid, sodium salt	5 - 10	20592-85-2
sodium hexametaphosphate	1 - 5	68915-31-1

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### 3. HAZARDS IDENTIFICATION

Harmful if swallowed. Causes respiratory tract, skin and eye irritation.

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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. Drink 1-2 glasses of water. Never give anything by mouth to an unconscious person. 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 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 oxides of carbon, nitrogen and phosphorus.  
**Explosion data:**  
**Sensitivity to mechanical impact:** Not applicable  
**Sensitivity to static discharge:** Not applicable  
**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:** Special ventilation requirements not normally necessary.  
**Respiratory protection:** Not normally necessary.  
**Eye protection:** Wear safety glasses.  
**Other protection:** Wear protective clothing as necessary to prevent skin contact.

### Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
methylene phosphonic acid, sodium salt	Not available		
sodium hexametaphosphate	Not available		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Solubility in water:</b> 100%
<b>Boiling point:</b> 100°C	<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> 1.106	<b>pH:</b> 9.0 - 10.0
<b>Appearance &amp; odour:</b> clear, straw-coloured liquid with a characteristic 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:** No known significant effects.  
**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 available

### 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>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.

**Synergistic product:** Not available

**HAZARDOUS INGREDIENTS**  
methylene phosphonic acid, sodium salt

CAS NO.	TOXICITY DATA
20592-85-2	LD <sub>50</sub> Oral (rat) >17'000 mg/kg LD <sub>50</sub> Dermal (rabbit) >15'000 mg/kg
68915-31-1	LD <sub>50</sub> Oral (rat) 6200 mg/kg

sodium hexametaphosphate

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** Expected to be fully biodegradable.

**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 for transport.

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## 15. REGULATORY INFORMATION

**WHMIS:** D2B Toxic materials causing other chronic 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