

# 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:** NO. 30 BOILER COMPOUND

Code: S745

**Other name:**

**Distributed by:**

**Product use:** boiler water treatment

**Date completed:** January 11, 2016

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
Sodium hydroxide (50%)	3-7	1310-73-2
Morpholine	1-5	110-91-8
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	3-7	64-02-8

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## 3. HAZARDS IDENTIFICATION

Corrosive liquid. Causes burns. 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. 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 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. 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
Sodium hydroxide (50% Sol.)	2 mg/m3 Ceil.	Not available	
Morpholine	TLV (skin) 20 ppm		
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	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> 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> 1.11	<b>pH:</b> alkaline
<b>Appearance &amp; odour:</b> clear, pale liquid with amine 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:** Reacts with acids and metals  
**Hazardous decomposition products:** Not available

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## 11. TOXICOLOGICAL PROPERTIES

### POTENTIAL ACUTE HEALTH EFFECTS

**Inhalation:** Corrosive to respiratory system.  
**Ingestion:** Harmful if swallowed. Causes burns to mouth, throat and stomach.  
**Eye contact:** Corrosive to eyes. Causes severe burns.  
**Skin contact:** Corrosive to skin. Causes severe burns.  
**Skin absorption:** Not applicable

### POTENTIAL CHRONIC HEALTH EFFECTS:

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

**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)

**Reproductive toxicity:**

**Teratogenicity:**

**Mutagenicity:**

**Synergistic product:**

No known significant effects.

No known significant effects.

No known significant effects.

No known significant effects.

Not available

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**HAZARDOUS INGREDIENTS**

Sodium hydroxide (50%)

Morpholine

tetrasodium salt of ethylene diamine  
tetraacetic acid (EDTA)

CAS NO.

1310-73-2

110-91-8

64-02-8

**TOXICITY DATA**

LD<sub>50</sub> oral (rabbit) 365 mg/kg

LD<sub>50</sub> Oral (rat) 1050 mg/kg

LC<sub>50</sub> Inhalation (rat) 4000 ppm

LD50 Oral (rat) >2000 mg/kg

LD50 Dermal (rabbit) 1350 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:**

SODIUM HYDROXIDE, SOLUTION; UN 1824; Class 8; PG II

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**15. REGULATORY INFORMATION**

**WHMIS:**

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Corrosive material

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