

Safety Data Sheet

1. IDENTIFICATION

Product Identifier: NO. 10 BOILER COMPOUND **Date of Revision:** January 31, 2018
Product Code: S762
Other Name(s):
Distributed By:
Recommended Use and Restrictions on Use: boiler water treatment
Manufactured By: Ostrem Chemical Co. Ltd. Phone: 780-440-1911
2310 - 80th Avenue NW In Case of Emergency Only, Phone
Edmonton, Alberta, Canada T6P 1N2 CANUTEC: 613-996-6666
www.ostrem.com

2. HAZARDS IDENTIFICATION

Classification of the Mixture: Eye Damage/Irritation - Category 1
Skin Corrosion/Irritation - Category 1
Acute Toxicity, Oral - Category 4
Specific Target Organ Toxicity (Repeated Exposure) - Category 2
Corrosive to Metals - Category 1

Label Elements:

Hazard Pictogram(s):



Signal Word: DANGER

Hazard Statement(s): Causes severe skin burns and eye damage.
Harmful if swallowed.
May cause damage to organs (kidneys, liver, central nervous system) through prolonged or repeated exposure.
May be corrosive to metals.

Precautionary Statement(s):

Prevention: Wear protective gloves, protective clothing, and eye/face protection.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe fumes or vapours.
Keep only in original packaging.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison centre or physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a poison centre or physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison centre or physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison centre or physician.
Get medical advice/attention if you feel unwell.
Absorb spillage to prevent material-damage.

Storage: Store locked up.
Store in a corrosion resistant container with a resistant inner liner.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical/health hazards not otherwise classified:

There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup).

3. COMPOSITION/INFORMATION ON INGREDIENTS

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<u>Chemical Name</u>	<u>Conc.</u>	<u>CAS #</u>	<u>Common Names</u>
ethylene glycol	30 - 60%	107-21-1	
potassium hydroxide (45%)	15 - 40%	1310-58-3	caustic potash, lye
tetrasodium salt of ethylene diamine tetraacetic acid (40%)	5 - 10%	64-02-8	

4. FIRST-AID MEASURES

Necessary Measures:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison centre or physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a poison centre or physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison centre or physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison centre or physician.
Get medical advice/attention if you feel unwell.
Absorb spillage to prevent material-damage.

Most important symptoms, both acute and delayed:

Causes serious eye damage.
Causes severe skin burns and eye damage.
Harmful if swallowed.
May cause damage to organs (kidneys, liver, central nervous system) through prolonged or repeated exposure.

Indication of immediate medical attention and special treatment needed, if necessary:

not applicable

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical (e.g.: hazardous combustion products):

May liberate carbon monoxide, carbon dioxide, and sulphur dioxide.

Special protective equipment and precautions for firefighters:

As for surrounding fire. Firefighters should wear full protective clothing and self contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective equipment. See section 8.

Environmental precautions:

Prevent from entering sewers, waterways or low areas.

Methods and materials for containment and 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

Precautions for safe handling:

Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe fumes or vapours.
Keep only in original packaging.
Do not ingest. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities:

Store locked up.
Store in a corrosion resistant container with a resistant inner liner.
Keep out of reach of children. Store in a cool, dry area.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters - Exposure limits:

Ingredient:

ethylene glycol

Limit:

TWA: 100 mg/m³ ACGIH (TLV)

CEIL: 125 mg/m³ OSHA (PEL)

CEIL: 50 ppm OSHA (PEL)

ACGIH Ceiling: 2 mg/m³

not available

potassium hydroxide (45%)

tetrasodium salt of ethylene diamine tetraacetic

acid (40%)

Appropriate 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.

Other protection:

Wear protective gloves, protective clothing, and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc.):

clear, light to dark brown liquid

Odour:

slight ammonia odour

Odour threshold:

not available

pH:

13+

Melting/Freezing point:

not available

Initial boiling point and range:

not available

Flash point:

not applicable

Evaporation rate:

not available

Flammability (solid, gas):

not available

Upper/lower flammability or explosive limits:

not available

Vapour pressure:

not available

Vapour density:

not available

Relative density (specific gravity):

1.160

Solubility(ies):

complete

Partition co-efficient: n-octanol/water:

not available

Auto-ignition temperature:

not available

Decomposition temperature:

not available

Viscosity:

not available

10. STABILITY AND REACTIVITY

Reactivity:

This material is considered to be non-reactive under normal use conditions.

Chemical stability:

Stable.

Possibility of hazardous reactions:

not available

Conditions to avoid (e.g.: static discharge, shock or vibration):

not applicable

Incompatible materials:

Oxidizers / Acid / Other

Hazardous decomposition products:

not available

11. TOXICOLOGICAL INFORMATION

POTENTIAL ACUTE HEALTH EFFECTS

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Inhalation:	Inhalation of mist may cause damage to nasal and respiratory passages. Irritation may lead to chemical pneumonitis and pulmonary edema.
Ingestion:	Harmful if swallowed.
Eye contact:	Causes serious eye damage.
Skin contact:	Causes severe skin burns and eye damage.
Skin absorption:	not available

POTENTIAL CHRONIC HEALTH EFFECTS

Inhalation:	not available
Ingestion:	not available
Eye contact:	not available
Skin contact:	not available
Skin absorption:	not available

Mutagenicity:	not available
Carcinogenicity:	This information, if applicable, can be found in Section 2.
Reproductive toxicity:	This information, if applicable, can be found in Section 2.
Sensitization of product:	This information, if applicable, can be found in Section 2.
Specific Target Organ Toxicity - single exposure:	This information, if applicable, can be found in Section 2.
Specific Target Organ Toxicity - repeated exposure:	This information, if applicable, can be found in Section 2.

Toxicological Data:

<u>Ingredient:</u>	<u>Data:</u>
ethylene glycol	Oral LD50: 4700 mg/kg (rat)
potassium hydroxide (45%)	Oral LD50: 273 mg/kg (rat)
tetrasodium salt of ethylene diamine tetraacetic acid (40%)	Oral LD50: 1000 mg/kg (rat)

Other Toxicological Information on Ingredients:

ethylene glycol

There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup). This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs.

The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):	not available
Persistence and degradability:	not available
Bioaccumulative potential:	not available
Mobility in soil:	not available
Other adverse effects:	not available
Ecological Information on Ingredients:	not available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG classification: UN 1760; CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE); CLASS 8; PG II

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. PREPARATION INFORMATION

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

Date of Preparation: February 02, 2017

Date of Revision: January 31, 2018

This Safety Data Sheet may not be changed or altered in any way without the express knowledge and permission of Ostrem Chemical Co. Ltd.

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