

# Safety Data Sheet

## 1. IDENTIFICATION

**Product Identifier:** SBT-445  
**Product Code:** S748  
**Other Name(s):**

**Date of Revision:** February 09, 2017

**Recommended Use and Restrictions on Use:** boiler water treatment

**Distributed By:** Halabi Chemicals Ltd.  
127 Ozerna Rd. NW  
Edmonton, Alberta, Canada T5Z 2Z4  
www.halabichemicals.ca

Phone: 780-473-2608  
In Case of Emergency Only, Phone  
CANUTEC: 613-996-6666

## 2. HAZARDS IDENTIFICATION

**Classification of the Mixture:** Eye Damage/Irritation - Category 1  
Skin Corrosion/Irritation - Category 1  
Acute Toxicity, Oral - Category 3  
Flammable Liquids - Category 3

**Label Elements:**

**Hazard Pictogram(s):**



**Signal Word:** DANGER

**Hazard Statement(s):** Causes severe skin burns and eye damage.  
Toxic if swallowed.  
Flammable liquid and vapour.

**Precautionary Statement(s):**

**Prevention:** Do not breathe dusts or mists.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wear protective gloves, protective clothing, and eye/face protection.

**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.

**Storage:** Store locked up.  
Store in a well-ventilated place. Keep cool.

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

**Physical/health hazards not otherwise classified:**

not applicable

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Conc.</u>	<u>CAS #</u>	<u>Common Names</u>
cyclohexylamine	10.0%	108-91-8	
morpholine	5.0%	110-91-8	

## 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.

**Most important symptoms, both acute and delayed:**

Causes serious eye damage.  
Causes severe skin burns and eye damage.  
Toxic if swallowed.

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 nitrogen oxides.

**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:**

Do not breathe dusts or mists.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not ingest. Avoid contact with eyes, skin and clothing.

**Conditions for safe storage, including any incompatibilities:**

Store locked up.

Store in a well-ventilated place. Keep cool.

Keep out of reach of children. Store in a cool, dry area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters - Exposure limits:**

Ingredient:

cyclohexylamine

morpholine

Limit:

OSHA TWA: 10 ppm/41 mg/m<sup>3</sup>

ACGIH TLV-TWA: 20 ppm

**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

<b>Appearance (physical state, colour etc.):</b>	clear, pale liquid
<b>Odour:</b>	amine odour
<b>Odour threshold:</b>	not available
<b>pH:</b>	alkaline
<b>Melting/Freezing point:</b>	not available
<b>Initial boiling point and range:</b>	not available
<b>Flash point:</b>	55 C
<b>Evaporation rate:</b>	not available
<b>Flammability (solid, gas):</b>	not available
<b>Upper/lower flammability or explosive limits:</b>	not available
<b>Vapour pressure:</b>	not available
<b>Vapour density:</b>	not available
<b>Relative density (specific gravity):</b>	0.987
<b>Solubility(ies):</b>	complete
<b>Partition co-efficient: n-octanol/water:</b>	not available
<b>Auto-ignition temperature:</b>	not available
<b>Decomposition temperature:</b>	not available
<b>Viscosity:</b>	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):**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Incompatible materials:**

Oxidizers / Acid / Other

**Hazardous decomposition products:**

not available

**11. TOXICOLOGICAL INFORMATION****POTENTIAL ACUTE HEALTH EFFECTS**

**Inhalation:** High vapour concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness, and irregular eye movements. Prolonged or repeated overexposure may result in lung damage. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

**Ingestion:** Toxic 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:**Ingredient:

cyclohexylamine

Data:

Oral LD50: 11 mg/kg (rat)

Dermal LD50: 277 mg/kg (rabbit)

Inhalation LC50: 7.5 mg/L (rat)

Oral LD50: 1900 mg/kg (rat)

Dermal LD50: 500 mg/kg (rabbit)

morpholine

**Other Toxicological Information on Ingredients:**

not applicable

**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 2920; CORROSIVE LIQUID, FLAMMABLE, N.O.S. (CYCLOHEXYLAMINE, MORPHOLINE); CLASS 8 (3); 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**

**Prepared by:** Technical Services Department, Halabi Chemicals Ltd., Ph.: 780-473-2608

**Date of Preparation:** February 09, 2017

**Date of Revision:** February 09, 2017

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