

# Safety Data Sheet

## 1. IDENTIFICATION

**Product Identifier:** 3200 H D LIQUID STEAM

**Date of Revision:** January 31, 2018

**Product Code:** K556

**Other Name(s):**

**Distributed By:**

**Recommended Use and Restrictions on Use:**

**Manufactured By:** Ostrem Chemical Co. Ltd.  
2310 - 80th Avenue NW  
Edmonton, Alberta, Canada T6P 1N2  
www.ostrem.com

Phone: 780-440-1911  
In Case of Emergency Only, Phone  
CANUTEC: 613-996-6666

## 2. HAZARDS IDENTIFICATION

**Classification of the Mixture:** Eye Damage/Irritation - Category 2A  
Skin Corrosion/Irritation - Category 2

**Label Elements:**

**Hazard Pictogram(s):**



**Signal Word:** WARNING

**Hazard Statement(s):** Causes serious eye irritation.  
Causes skin irritation.

**Precautionary Statement(s):**

**Prevention:** Wash hands thoroughly after handling.  
Wear protective gloves and eye protection.

**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice.  
IF ON SKIN: Wash with plenty of water.  
If skin irritation occurs: Get medical advice.  
Take off contaminated clothing and wash it before reuse.

**Storage:** not applicable

**Disposal:** not applicable

**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>
monoethanolamine	1 - 5%	141-43-5	

## 4. FIRST-AID MEASURES

**Necessary Measures:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice.  
IF ON SKIN: Wash with plenty of water.  
If skin irritation occurs: Get medical advice.  
Take off contaminated clothing and wash it before reuse.

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

Causes serious eye irritation.  
Causes skin irritation.

**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 oxides of sodium.

**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 ingest. Avoid contact with eyes, skin and clothing.

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

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters - Exposure limits:**Ingredient:

monoethanolamine

Limit:

ACGIH TWA: 6 ppm

ACGIH STEL: 6 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 and eye protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance (physical state, colour etc.):</b>	green viscous liquid
<b>Odour:</b>	pleasant odour
<b>Odour threshold:</b>	not available
<b>pH:</b>	11.5
<b>Melting/Freezing point:</b>	not available
<b>Initial boiling point and range:</b>	not available
<b>Flash point:</b>	not applicable
<b>Evaporation rate:</b>	not available
<b>Flammability (solid, gas):</b>	not available

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Upper/lower flammability or explosive limits:	not available
Vapour pressure:	not available
Vapour density:	not available
Relative density (specific gravity):	1.016
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

### Hazardous decomposition products:

not available

## 11. TOXICOLOGICAL INFORMATION

### POTENTIAL ACUTE HEALTH EFFECTS

Inhalation:	May cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed.
Eye contact:	Causes serious eye irritation.
Skin contact:	Causes skin irritation.
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:

monoethanolamine

#### Data:

Oral LD50: 1089 mg/kg (rat)

### Other Toxicological Information on Ingredients:

## 12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):	not available
Persistence and degradability:	not available
Bioaccumulative potential:	not available

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**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 2491; ETHANOLAMINE; CLASS 8; PG III

## 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, Ostrem Chemical Co. Ltd., Ph.: 780-440-1911  
**Date of Preparation:** February 08, 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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