

## 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:** BOWL CLEANER & SANITIZER 23%

Code: J450

**Other name:**

**Distributed by:**

**Product use:** cleaner and sanitizer

**Date completed:** July 13, 2011

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
muriatic acid	30-60	7647-01-0
n-alkyl dimethylbenzyl ammonium chloride	0.5-1.5	68424-85-1

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### 3. HAZARDS IDENTIFICATION

Corrosive liquid. Causes burns. Harmful if swallowed.  
Do not mix with bleach; poisonous chlorine gas will be liberated.

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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. 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:** Hydrogen and chlorine gas formed at temperatures over 1500C.

**Explosion data:**

**Sensitivity to mechanical impact:** Not applicable

**Sensitivity to static discharge:** Not applicable

**Special firefighting procedures:** As for surrounding fire.

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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
muriatic acid	5ppm PEL-C		
n-alkyl dimethylbenzyl ammonium chloride	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> 1% solution: 1.4
<b>Appearance &amp; odour:</b>	opacified, blue liquid with sharp pungent odour

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Conditions of instability:** Not available  
**Incompatibility:** Incompatible with strong bases, metals, phosphines, acetylides, borides, carbides, silicides, vinyl acetate, formaldehyde, hypochlorites,  
**Conditions of reactivity:** Not available  
**Hazardous decomposition products:** Contact with hypochlorites (bleach) liberates chlorine gas. May react violently with incompatible substances.

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## 11. TOXICOLOGICAL PROPERTIES

### POTENTIAL ACUTE HEALTH EFFECTS

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

### POTENTIAL CHRONIC HEALTH EFFECTS:

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

<b>Irritancy of product:</b>	See WHMIS criteria
<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.

**Teratogenicity:** No known significant effects.  
**Mutagenicity:** No known significant effects.  
**Synergistic product:** Not available

**HAZARDOUS INGREDIENTS**

muriatic acid

CAS NO.

7647-01-0

TOXICITY DATA

LC50 (inhalation) mouse: 757ppm/4H

LD50 (oral) rabbit:900mg/kg

n-alkyl dimethylbenzyl ammonium  
chloride

68424-85-1

Not available

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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:** HYDROCHLORIC ACID, Class 8, UN 1789, PG II

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**15. REGULATORY INFORMATION**

**WHMIS:** E Corrosive Material  
D1A Very Toxic Material

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