

## 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:** LIQUID CHLORINE 12% SANITIZER

Code: J436

**Other name:**

**Distributed by:**

**Product use:** sanitizer, bleaching agent

**Date completed:** July 13, 2011

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
sodium hypochlorite (providing 12% available chlorine)	60-100	7681-52-9

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### 3. HAZARDS IDENTIFICATION

Corrosive liquid. Causes burns. Harmful if swallowed. Oxidizing Material.  
Do not mix with acid; 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. 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 (%):** Not applicable

**Lower:**

**Upper:**

**Fire extinguishing substances:** water

**Autoignition temperatures:** not applicable

**Hazardous combustion products:** may produce chlorine gas and/or hydrogen chloride gas

**Explosion data:**

**Sensitivity to mechanical impact:** Not available

**Sensitivity to static discharge:** Not available

**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, well-ventilated area and away from incompatible materials. Venting of containers is advisable.

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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 hypochlorite	1ppm (chlorine)		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Solubility in water:</b> soluble
<b>Boiling point:</b> slowly decomposes above 40C	<b>Vapour pressure:</b> 12.1 mm Hg at 20C
<b>Vapour density:</b> Not available	<b>Evaporation rate:</b> Not available
<b>Freezing point:</b> -19C	<b>Odour threshold:</b> Not available
<b>Sp. Gravity:</b> 1.167	<b>pH:</b> 12.6 1% solution: 9.8
<b>Appearance &amp; odour:</b>	pale yellow liquid with strong chlorine odour

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Conditions of instability:** unstable at temperatures above 40C, in sunlight, and in contact with acid  
**Incompatibility:** ( ) Water (X) Oxidizers (X) Acid ( ) Base ( ) Other  
**Conditions of reactivity:** Not available  
**Hazardous decomposition products:** chlorine (by reaction with acids)

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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:** 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:** Prolonged contact may cause discomfort.  
**Skin absorption:** Not available

**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

HAZARDOUS INGREDIENTS  
sodium hypochlorite

CAS NO. TOXICITY DATA  
7681-52-9 LD<sub>50</sub> Oral (rat) 8910 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:** HYPOCHLORITE SOLUTION; Class 8; UN 1791; PG III

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## 15. REGULATORY INFORMATION

**WHMIS:**

E	Corrosive Material
C	Oxidizing Material
D2B	Toxic Material

**NSF Certification:** This product is certified under NSF/ANSI Standard 60 for disinfection and oxidation at a maximum usage of 87 mg/L.

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