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**MATERIAL SAFETY DATA SHEET**

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Date completed: Mar. 31, 1997

**PRODUCT NAME:** BOWL CLEANER 15% **CODE:** J-451  
**OTHER NAME:**  
**DISTRIBUTED BY:**

**WHMIS CLASSIFICATION:** E; DIA  
**TDG CLASSIFICATION:** Hydrochloric acid solution; Class 8 (9.2);  
UN 1789; PG II

HAZARDOUS INGREDIENTS	%WT/WT	CAS NO.	TOXICITY DATA (LD <sub>50</sub> & LC <sub>50</sub> )
Hydrochloric Acid (as 100% HCl)	15%	7647-01-0	ACGIH TLV - 5 ppm LC <sub>50</sub> Inhalation(rat) - 3124 ppm for 1 hour LD <sub>50</sub> Oral(rabbit) 900 mg/kg

**PHYSICAL DATA FOR PRODUCT**

Physical State: Liquid Sp.Gravity: 1.056 pH: Strong acid < 1  
Boiling Point: 85.3°C Vapour Pressure: 24 mm Hg at 20°C  
Vapour Density: For HCl gas 1.27 Evaporation Rate: Not Avail.  
Freezing Point: Not Avail.  
Solubility in Water: 100%  
Appearance & Odour: Red colored solution with a sharp pungent  
irritating odour.

**FIRE AND EXPLOSION DATA FOR PRODUCT**

Flash Point (Test Method): N/A  
Flammable Limits in Air, % by vol. Non-flammable Lower: N/A Upper: N/A  
Fire Extinguishing Substances: ( ) Water Fog ( ) Foam ( ) CO<sub>2</sub>  
( ) Dry Chem (X) Other: Use appropriate media to extinguish surrounding  
fire.  
Hazardous Combustion Products: Will emit toxic fumes of hydrogen chloride.

Special Firefighting Procedures: Full protective equipment, including  
a self contained breathing apparatus should be worn to protect  
against corrosive liquid and vapour.

**REACTIVITY DATA FOR PRODUCT**

Incompatibility: ( ) Water (X) Oxidizing Material ( ) Acid (X) Base  
(X) Other: High temperatures, metals.  
Hazardous Decomposition Products: Reacts with most metals to produce  
hydrogen which may form explosive mixtures with air. When  
heated, hydrogen chloride is released.

Chemical Stability: Stable under normal conditions.

\*N/A - Not applicable.

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**HEALTH HAZARD INFORMATION FOR PRODUCT**

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**EMERGENCY and FIRST AID PROCEDURES**

Inhalation: Remove victim to fresh air. If not breathing give artificial respiration. Get immediate medical attention.

Ingestion: Do not induce vomiting. Unless unconscious, give 1 - 2 glasses of milk or water to dilute the material. Get immediate medical attention.

Eyes: Flush with running water for at least 20 minutes. Get medical attention immediately.

Skin: Flush with running water for at least 20 minutes. Get immediate medical attention.

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**EFFECTS OF OVEREXPOSURE (Acute and Chronic)**

Inhalation: Irritation of the eyes, nose, throat and upper respiratory tract, coughing, choking. Extreme over exposure may lead to ulceration of the oral and nasal mucosa, pulmonary edema and possible death.

Ingestion: Severe burns to mouth, throat, esophagus and stomach; nausea, vomiting. Risk of stomach perforation, convulsions, coma & death.

Eyes: Severe burns, conjunctivitis leading to permanent damage, possible blindness.

Skin: Severe skin burns, blisters. Prolonged or repeated contact to dilute solutions may cause irritation and dermatitis.

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**PREVENTIVE MEASURES**

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Steps to be taken upon release or spillage (including neutralizing):  
Remove all ignition sources. Ventilate and evacuate area. Stop and contain leak or spill. Cover with dry sand, ashes or gravel. Neutralize and dispose of in polyethylene containers. Do not allow to enter water ways. Sodium carbonate can be used as neutralizing agent.

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Waste disposal method: Consult federal, provincial and local regulations. May be possible to flush and disperse neutralized material into drain with large amounts of water or dispose of neutralized contaminated material in a secured sanitary landfill site.

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Handling and Storage Requirements: Store in cool, dry well ventilated area in closed containers away from heat sources, metal and oxidizers.

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Ventilation Requirements (Local or General):  
Local ventilation recommended.

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Respiratory Protection:  
A mask should be worn.

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Eye Protection: Chemical Workers goggles.

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Other Protection: Impervious clothing - rubber gloves and coveralls should be worn.

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Prepared by: Tech Service Dept, Ostrem Chemical Co. Ltd., Ph (403) 440-1911