MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

OSTREM CHEMICAL CO. LTD. Phone: 780-440-1911 or 780-446-0177

2310 - 80 AVENUE In Case of Emergency Only:

EDMONTON AB T6P 1N2 phone CANUTEC at (613) 996-6666

Product name: MURIATIC ACID (INHIBITED) Code: S753

Other name: Distributed by:

Product use: acid descaler **Date completed:** April 01, 2014

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient%W/WCAS numbermuriatic acid60-1007647-01-0

3. HAZARDS IDENTIFICATION

Corrosive liquid. Causes burns. Harmful if swallowed.

Do not mix with bleach; poisonous chlorine gas will be liberated.

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.

5. FIRE - FIGHTING MEASURES

Flash point (test method):

Flammable limits (%):

Lower:

Upper:

Not applicable

Not applicable

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.

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.

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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Solubility in water: Complete

Boiling point: 90.5C **Vapour pressure:** 100mm Hg at 20C

Vapour density:1.268Evaporation rate:<1</th>Freezing point:-51COdour threshold:1-5ppmSp. Gravity:1.12pH:<1</th>

Appearance & odour: colouless or slightly yellow, furning liquid with a pungent odour

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.

11. TOXICOLOGICAL PROPERTIES

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation: Irritating to respiratory system.

Ingestion: Harmful if swallowed. Causes burns to mouth, throat and stomach.

Eve contact: Corrosive to eves. 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 availableEye contact:Not availableSkin contact:Not availableSkin 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) No known significant effects.

Reproductive toxicity:No known significant effects.Teratogenicity:No known significant effects.Mutagenicity:No known significant effects.

Synergistic product: Not available

HAZARDOUS INGREDIENTS CAS NO. TOXICITY DATA

muriatic acid 7647-01-0 LC50 (inhalation) mouse: 757ppm/4H

LD50 (oral) rabbit:900mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicological information: Not available

Other information:

13. DISPOSAL CONSIDERATIONS

Waste disposal: Disposal of all waste must be done according to local, provincial and federal regulations.

14. TRANSPORT INFORMATION

TDG classification: HYDROCHLORIC ACID, Class 8, UN 1789, PG II

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.

16. PREPARATION INFORMATION

Prepared by: Technical Services Department, Ostrem Chemical Co. Ltd., Ph: (780) 440-1911