Safety Data Sheet

1. IDENTIFICATION

Product Identifier: LIQ. RUST REMOVING SOUR **Date of Revision:** M
Product Code: L539
Other Name(s): not applicable
Distributed By: HADDON HOLDINGS LIMITED
Recommended Use and Restrictions on Use: laundry sour

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

Phone/Emergency F
780-440-1911
Mon. - Fri. 8:00am -

2. HAZARDS IDENTIFICATION

Classification of the Mixture:
Acute Toxicity - Dermal - Category 2
Acute Toxicity, Inhalation - Category 3
Acute Toxicity, Oral - Category 3
Corrosive to Metals - Category 1
Serious Eye Damage/Irritation - Category 1
Skin Corrosion/Irritation - Category 1

Label Elements:
Hazard Pictogram(s):

Signal Word: DANGER

Hazard Statement(s):
Fatal if in contact with skin.
Toxic if inhaled.
Toxic if swallowed.
May be corrosive to metals.
Causes serious eye damage.
Causes severe skin burns and eye damage.

Precautionary Statement(s):

Prevention:
Do not breathe dusts or mists.
Wear protective gloves, protective clothing, and eye/face protection.
Do not get in eyes, on skin, or on clothing.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust, vapours or spray.
Use only outdoors or in a well-ventilated area.
Keep only in original packaging.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a p
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse sk
contaminated clothing before reuse. Immediately call a poison centre or phys
IF ON SKIN: Call a physician immediately. Take victim to hospital immediately.
clothing and shoes immediately. Wash off with plenty of water. First treatment
paste. Rinse with lukewarm running water. Make sure hospital staff is aware c
characteristics of injuries caused by HF exposures and the fact that the syste
exposure will require prompt serum monitoring of fluorides, calcium, magnesiu
calcium replacement by infusion.

IF SWALLOWED:If conscious, rinse mouth with fresh water, give 1% aqueous
drink.
First aid - Note to Physician: Immediately apply calcium gluconate gel 2.5% a

affected area using rubber gloves; continue to massage while repeatedly app
after pain is relieved. HF-Antidote Gel from IPS Healthcare is recommended a
from hydrofluoric acid.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
centre or physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
to do. Continue rinsing. Immediately call a poison centre or physician.
Absorb spillage to prevent material-damage.

Storage: Store in a well-ventilated place.
Keep container tightly closed.
Store locked up.
Store in a corrosion resistant container with a resistant inner liner.

Disposal: Dispose of contents/container in accordance with local/regional/national/inter

Physical/health hazards not otherwise classified:

not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Conc. w/w	CAS #	Common N
hydrogen fluoride (49%)	5 - 10%	7664-39-3	hydrofluor
ammonium bifluoride	10 - 30%	1341-49-7	

4. FIRST-AID MEASURES

Necessary Measures:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present a rinsing. Immediately call a poison centre or physician.
Absorb spillage to prevent material-damage.
IF ON SKIN: Call a physician immediately. Take victim to hospital immediately. Take off contamin immediately. Wash off with plenty of water. First treatment with calcium gluconate paste. Rinse w water. Make sure hospital staff is aware of the unique characteristics of injuries caused by HF ex the systemic toxic effects of the exposure will require prompt serum monitoring of fluorides, calciu sodium, and calcium replacement by infusion.

IF SWALLOWED:If conscious, rinse mouth with fresh water, give 1% aqueous calcium gluconate
First aid - Note to Physician: Immediately apply calcium gluconate gel 2.5% and massage into th rubber gloves; continue to massage while repeatedly applying gel until 15 minutes after pain is r from IPS Healthcare is recommended as treatment for injuries from hydrofluoric acid.

Most important symptoms, both acute and delayed:

Fatal if in contact with skin.
Toxic if inhaled.
Toxic if swallowed.
Causes serious eye damage.
Causes severe skin burns and eye damage.

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 hydrogen gas.

Special protective equipment and precautions for firefighters:

As for surrounding fire. Firefighters should wear full protective clothing and self contained breath

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 sc
Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean
absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Precautions for safe handling:

Do not breathe dusts or mists.
Do not get in eyes, on skin, or on clothing.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust, vapours or spray.
Use only outdoors or in a well-ventilated area.
Keep only in original packaging.
Do not ingest. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities:

Store locked up.
Store in a well-ventilated place.
Keep container tightly closed.
Store locked up.
Store in a corrosion resistant container with a resistant inner liner.
Keep out of reach of children. Store in a cool, dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters - Exposure limits:

Ingredient:	Limit:
hydrogen fluoride (49%)	ACGIH TLV-TWA: 2 ppm Ceiling Immediately Dangerous to Life or Health: 30
ammonium bifluoride	not available

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 respirato

Other protection:

Wear protective gloves, protective clothing, and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc.):	clear colourless liquid
Odour:	pungent odour
Odour threshold:	not available
pH:	4.1
Melting/Freezing point:	not available
Initial boiling point and range:	not available
Flash point:	not applicable
Evaporation rate:	not available
Flammability (solid, gas):	not available
Upper/lower flammability or explosive limits:	not available
Vapour pressure:	not available
Vapour density:	not available
Relative density (specific gravity):	1.058
Solubility(ies):	100%
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:

Reacts with metals.

Conditions to avoid (e.g.: static discharge, shock or vibration):

not applicable

Incompatible materials:

Oxidizers / Base

Hazardous decomposition products:

not available

11. TOXICOLOGICAL INFORMATION

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation: Inhalation: Corrosive! Product may cause severe irritation of the nose, throat anc Repeated and/or prolonged exposures may cause productive cough, running nc pulmonary edema and reduction of pulmonary function. Excessive contact with p of mucous membranes due to absorption of moisture and oils. In general, long-te concentrations of dust may cause increased mucous flow in the nose and respira

Ingestion: Toxic if swallowed.

Eye contact: Causes serious eye damage.

Skin contact: Causes severe skin burns and eye damage.

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 fo
Reproductive toxicity: This information, if applicable, can be fo
Sensitization of product: This information, if applicable, can be fo
Specific Target Organ Toxicity - single exposure: This information, if applicable, can be fo
Specific Target Organ Toxicity - repeated exposure: This information, if applicable, can be fo

Toxicological Data:

Ingredient:	Data:
hydrogen fluoride (49%)	Oral LD50: ~5 mg/kg (rat) Dermal LD50: ~5 mg/kg (rat) Inhalation LC50: ~0.5 mg/L 4h (rat)
ammonium bifluoride	Oral LD50: 60 mg/kg (rat) Inhalation LC50: 3 mg/L (rat) Dermal LD50: 50 mg/kg (rat)

Other Toxicological Information on Ingredients:

hydrogen fluoride (49%)

Severe hydrofluoric acid exposure may result in systemic fluoride poisoning. Hydrofluoric acid car into tissues, causing spontaneous depolarization of the nervous tissue. Excessive amounts can: degenerate bone structure, cause joint damage, kidney damage, and heart, asthma, nerve, inte rheumatism problems.

12. ECOLOGICAL INFORMATION

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

14. TRANSPORT INFORMATION

TDG classification: UN 2922; CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, AMI HYDROGENDIFLUORIDE); CLASS 8 (6.1); PG II

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regu SDS contains all the information required by the HPR.

16. PREPARATION INFORMATION

Prepared by: Technical Services Department, Ostrem Chemical Co. Ltd., Ph.: 780-440-191

Date of Preparation: March 09, 2023
Date of Revision: March 09, 2023

End of Document

LIQ. RUST REMOVING SOUR

[redacted]

March 09, 2023

Phone:

4:30pm MT

[redacted]

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