

SAFETY DATA SHEET (SDS) RUST REMOVER



SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identification

Product name : Rust Remover

Other means of identification

Product type : Liquid

Relevant identified uses

Recommended use : Liquid to remove the rust traces.

Restrictions on use : All other uses than those indicated on the product label and technical data sheet.

Details of the supplier of the safety data sheet

Supplier / Manufacturer : Kempro Services
6068 boul. Metropolitain Est, Suite 100, St-Léonard, Québec. H1S 1A9
Tel : 1-800-299-0548

E-mail : info@kemproservices.com

Emergency number

Emergency telephone number (with hours of operation) : Poison Control Centre : 1-800-463-5060
CANUTEC : +1-613-996-6666 or *666 (cellphone)(24/7)

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

ACUTE TOXICITY/ORAL – Category 2
ACUTE TOXICITY/INHALATION – Category 2
SKIN CORROSION/IRRITATION - Category 1
EYE DAMAGE/IRRITATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY – repeated exposure - Category 1
EYE DAMAGE/IRRITATION - Category 1
HEALTH HAZARDS NOT OTHERWISE CLASSIFIED (CORROSION)- Category 1

GHS Label Elements

Hazard(s) pictograms :



GHS06



GHS08



GHS05

Signal word : Danger

Hazard statements : **H300** – Fatal if swallowed
H330 – Fatal if inhaled
H314 – Causes severe skin burns and eye damage
H372 – Causes damage to organs through prolonged or repeated exposure

Precautionary statements

- **Prevention** : **P260** – Do not breathe dust/fume/gas/mist/vapours/spray.
P264 – Wash thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- **Response** : **P284** – In case of inadequate ventilation wear respiratory protection.
P310 – Immediately call a Poison Center or doctor/physician.
P330 – Rinse mouth.
P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P403 + P233–Store in a well-ventilated place. Keep container tightly closed.

- **Storage** : **P405** – Store locked up.
- **Disposal** : **P501** - Dispose of contents and container in accordance with local, regional and national regulations.

Other known hazards

Not additional information available

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture

- Substances** : Mixture
- Other means of identification** : Aqueous solution mainly composed by the following ingredients

CAS number /other identifiers/ Mixtures

- CAS number** : Not applicable

Ingredient name	% (p/p)	CAS number
Hydrofluoric Acid	10-30	7664-39-3

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST-AID MEASURES

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes.
- Inhalation** : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Ensure good air circulation. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact (or hair)** : Take off immediately all contaminated clothing. Flush contaminated skin with plenty of water. Get medical attention immediately
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, tip the victim forward to reduce the risk of aspiration.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Splashes in the eyes can cause irritation and burns.
- Inhalation** : The product irritates the nose, throat and respiratory tract.
- Skin contact** : Skin contact can cause burns.
- Ingestion** : This product causes severe burns to mouth, throat and stomach, nausea, vomiting.

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Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain, watering, burns and vision disturbances from slightly tangled up to complete blindness.
- Inhalation** : Coughing and difficulty breathing.
- Skin contact** : Adverse symptoms may include the following: Corrosive effect on skin and mucous membrane.
- Ingestion** : Adverse symptoms may include the following:
May cause gastro-intestinal irritation, diarrhea, nausea and vomiting.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (section 11)

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media** : Carbon dioxide (CO₂), extinguishing powder, water spray or alcohol resistant foam.
- Unsuitable extinguishing media** : None known

Specific hazards arising from the chemical

- Fire hazard** : During heating or in case of fire poisonous gases are produced.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: hydrogen and hydrogen fluoride.

Special protective equipment and precautions for fire-fighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any person risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : No further relevant information available.

Methods and materials for containment and cleaning up

- Methods for containment** : Stop leak if without risk. Eliminate all sources of flame. Move container from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Contaminated absorbent material may present the same hazards as the spilled material.
- Methods for cleaning up** : No special collection methods required. Dispose of in accordance with all national and local regulations.

SECTION 7. HANDLING AND STORAGE

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Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Limites d'exposition professionnelle

Ingrédients dangereux	Valeurs limites d'exposition
Hydrofluoric Acid	CA Quebec Provincial (Canada). TWA: 1.5 mg/m ³ STEL : 2.5 mg/m ³

Appropriate engineering controls

If user operations generate vapor aerosols or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

- General protection and hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products before eating, smoking and using lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Wear eye protection against chemical splashes.
- Hands protection** : Wear chemical-resistant, impervious gloves.
- Skin & body protection** : Wear appropriate protective clothing to prevent skin contact.
- Respiratory Protection** : When workers are facing concentrations above the exposure limit they must use appropriate certified respirator.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

Appearance

- Physical state** : Liquid
- Colour** : Colourless
- Odour** : Acide
- Odor threshold** : Not available.
- pH** : <1.0
- Melting point** : Not available.
- Freezing point** : Not available.
- Boiling point** : 100°C
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gaseous):** : Not applicable.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Heavier than air
- Relative density (g/ml)** : 1.100- 1.200

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Solubility : Soluble
Partition coefficient: : Not available.
noctanol/water
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Not available.

SECTION 10. STABILITY ET REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical Stability

The product is stable.

Possibility of hazardous reactions

Accumulation of flammable / explosive vapors.

Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking. Take measures against static discharges.

Incompatible materials

Corrosive to metals. Contact with metals may produce hydrogen a flammable gas.

Hazardous decomposition products

Gaseous Hydrogen fluoride (HF).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
Hydrofluoric Acid	Acute inhalation LC50	Rat	0.79 mg/kg

Sensibilization

There is no data available.

Mutagenicity

There is no data available.

Cancerogenicity

Classification

Product/ingredient name	OSHA	CIRC	NTP	ACGIH	EPA	NIOSH
Hydrofluoric Acid	-	-	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Central nervous system & lungs, liver and kidneys.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

Unlikely but possible.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 Watering, redness, conjunctivitis and cornea damage.

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- Inhalation** : Inhalation of higher concentrations may cause tracheobronchial mucous necrosis, tracheobronchitis, pulmonary edema, pulmonary hemorrhage or even death.
- Skin contact** : Adverse symptoms may include the following: second or third-degree burns, pain, skin necrosis and onycholysis, a painful separation of the tip of the fingernail from the finger itself.
- Ingestion** : Adverse symptoms may include the following:
Corrosion of digestive tract, strong stomach pains, nausea, vomiting, perforation of the esophagus or stomach, and death.

Delayed and immediate effects and also chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : Frequent or prolonged skin contact may cause eczema, a chronic, recurring and long-term inflammation of the skin.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

SECTION 12. ÉCOLOGICAL INFORMATION

Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrofluoric Acid	Acute CL50 660 mg/L (Marine water)	Leuciscus idus - Fish	48 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Component	Log Pow	Bioconcentration factor (BCF)
Hydrofluoric Acid	-1.4	There is no data available

Mobility in soil

- Soil/water partition coefficient (KOC)** : There is no data available

Other adverse effects

No known significant effects or critical hazards.







SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste treatment methods : Dispose of contents must be made according to local, state or national legislation. Do not allow to get into surface water, drains and ground water.

Container disposal: : Only empty containers could be recycled.

SECTION 14. TRANSPORT INFORMATION

	TDG Classification	IMDG	IATA
UN number	UN1790	UN1790	UN1790
UN proper shipping name	HYDROFLUORIC ACID, solution with not more than 60% hydrogen fluoride Class 8(6.1)	HYDROFLUORIC ACID, solution with not more than 60% hydrogen fluoride Class 8(6.1)	HYDROFLUORIC ACID, solution with not more than 60% hydrogen fluoride Class 8(6.1)
Transport hazard class(es)	 8  6.1	 8  6.1	 8  6.1
Packing group	II	II	II
Environmental hazards	Yes	Yes	Yes
Additional information	Remarks: Limited quantity in 1L or less	-	-

Special precautions for user **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15. REGULATORY INFORMATION

Listes canadiennes

Canadian NPRI : None of the components are listed.
CEPA Toxic substances (Canadian Environmental Protection Act) : None of the components are listed.
Canada inventory : All components are listed or exempted.

SECTION 16. OTHER INFORMATION

History

Date of issue : 03/20/2019
Version : 1
Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations
 HPR = Hazardous Products Regulations

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