



SAFETY DATA SHEET

CROWN Rust Remover

SECTION 01: IDENTIFICATION

Product identifier CROWN RUST REMOVER
Other means of identification #6090
Recommended use Rust Remover
Recommended restrictions Reserved for industrial and professional use.

Manufacturer
Company name Crown Chemical Manufacturing Inc. **Supplier's Name**
Address 106 Vulcan Street **Supplier's Address**
 Toronto, Ontario
 M9W 1L2
Emergency Tel: (905) 564-0904

SECTION 02: HAZARD(S) IDENTIFICATION

Hazard Classification	Skin corrosion/ irritation	Category 1
	Serious eye damage/ eye irritation	Category 1
	Acute Toxicity (Oral)	Category 2
	Acute Toxicity (Inhalation)	Category 2
	Corrosive to Metals	Category 1
	Specific Target Organ Toxicity - Repeated Exposure	Category 1

Label elements



Signal Word

Danger

Hazard Statement

H314: Causes severe skin burns and eye damage
 H300+H330: Fatal if swallowed or inhaled.
 H290: May be corrosive to metals
 H372: Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement

P260: Do not breathe vapors.
 P264: Wash hands thoroughly after handling.
 P262: Do not get in eyes, on skin, or on clothing.
 P303+361+353 If on skin (or hair): 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.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P363 Wash contaminated clothing before reuse.
 P403+233: Store in a well ventilated place. Keep container tightly closed.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Concentration %
Hydrofluoric Acid	7664-398-3	10-30
Ammonium Bifluoride	1341-49-7	10-30



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SECTION 04: FIRST-AID MEASURES

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Call a physician or poison control center immediately.
Skin contact	Immediately remove contaminated clothing under a shower. Flush exposed areas with large quantities of water for five minutes. Wash carefully behind ears, under nails and in skin folds. Get medical attention immediately.
Eye	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	See Section 11 for more detailed information on health effects and symptoms.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use water or Carbon Dioxide "CO ₂ " for fires in area.
Unsuitable extinguishing media	Do not use high pressure water jet or water stream.
Specific hazards arising from the chemical	Hydrogen gas may be generated when acid comes in contact with metal. At decomposition, emits highly corrosive fluoride fumes.
Special protective equipment and precautions for firefighters	Wear full protective equipment including a self-contained breathing apparatus.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective clothing, gloves, apron, boots, hat, and closed safety glasses or chemical splash goggles. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Methods and materials for containment and cleaning up

Neutralize spills with soda ash or lime slurry. Collect and dispose slurry waste to hazardous or special waste collection point and in accordance to applicable regulations. Never neutralize with a strong alkali material.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling	Keep out of reach of children. Do not breathe vapors. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
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Conditions for safe storage Keep only in original container. Safely lock container in a cool and well ventilated place.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits Overall Product: None established.

Ingredient: Hydrofluoric Acid
Agency: ACGIH TLV, Limit Type: TWA 0.5 ppm

Ingredient: Ammonium Bifluoride
Agency: ACGIH TLV, Limit Type: TWA 2.5 mg/m3

Appropriate Engineering Controls Effective exhaust ventilation system.

Personal Protective Equipment Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Gloves Chemical resistant gloves

Respiratory In case of inadequate ventilation use suitable respirator.

Eye Wear eye protection/face protection.

Clothing Use of impervious apron, boots and other protective equipment should be considered in order to prevent or minimize contact with this product.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Odour Pungent odour,

Physical State Liquid

Color Water white

Odour Threshold No data available.

pH Very acidic.

Freezing Point (°C) No data available.

Initial Boiling Point (°C) No data available.

Flashpoint (°C) No data available.

Evaporation Rate No data available.

Flammability No data available.



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Lower Explosive Limit No data available.

Upper Explosive Limit No data available.

Lower Flammability Limit No data available.

Upper Flammability Limit No data available.

Vapour Pressure (mm) No data available.

Vapour Density (Air = 1) No data available.

Relative Density No data available.

Solubility Soluble

Partition coefficient (n-octanol/water) No data available.

SECTION 10: STABILITY AND REACTIVITY

Auto Ignition Temp. (°C) No data available.

Decomposition Temperature No data available.

Viscosity No data available.

Reactivity Reaction with metals can potentially release dangerous hydrogen gas.

Chemical Stability Stable if used according to specifications.

Possibility of hazardous reactions Strong alkalis, metals.

Conditions to avoid Avoid contact with strong alkalis, metals and high temperatures.

Incompatible Materials Strong alkalis, metals, glass.

Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Skin Contact Eye Contact Ingestion
 Skin Absorption Inhalation

Toxicological Information Signs and Symptoms of Exposure
Based on test data and/or information on the components, this material may produce the following health effects:

EYES: Causes severe irritation experienced as discomfort or pain, excess blinking and tear



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production, with redness and swelling of the conjunctiva. Eye contact may cause permanent damage.

SKIN: May cause severe skin burns which may not be immediately painful or visible and may penetrate skin and damage underlying tissue.

INHALATION: Severely corrosive to the respiratory tract. May cause sore throat, coughing, labored breathing and lung congestion / inflammation.

INGESTION: May cause sore throat, abdominal pain, diarrhea, vomiting, severe burns of the digestive tract, and kidney dysfunction.

Chronic Exposure : Health injuries are not known or expected under normal use.

Toxicity

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : no data available

Germ cell mutagenicity : no data available

Teratogenicity : no data available

Numerical Measures Of Toxicity

Hazardous Ingredients	LD ₅₀ /LC ₅₀ Specify Species and Route
Hydrofluoric Acid	LD50 Not available. LC50 544ppm/4H (INHALATION, RAT)
Ammonium Bifluoride	LD50 = 130 mg/kg (ORAL, RAT)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity No data available.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil No data available

Other adverse effects No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods In accordance with municipal, provincial and federal regulations.

SECTION 14: TRANSPORT INFORMATION



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SECTION 14: TRANSPORT INFORMATION

UN number	UN 2922
TDG Classification	Corrosive Liquid, Toxic, N.O.S. (Hydrofluoric Acid) Class 8 (6.1)
Packing group	II
Special Shipping Instructions	Refer to Transportation of Dangerous Goods Regulations. Corrosive Liquid, Toxic, N.O.S. (Hydrofluoric Acid) Class 8 (6.1) UN 2922 Packing Group II

SECTION 15: REGULATORY INFORMATION

Regulatory Information	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.
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SECTION 16: OTHER INFORMATION

N/AP = Not Applicable
N/AV = Not Available
ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
GHS: Globally Harmonized System
HPR : Hazardous Products Regulations
IARC: International Agency for Research on Cancer
NIOSH: The National Institute for Occupational Safety and Health
NTP : National Toxicology Program
OSHA : United States Department of Labor - Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TWA: Time-Weighted-Average

Prepared By: Crown Chemical Manufacturing Inc.

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