
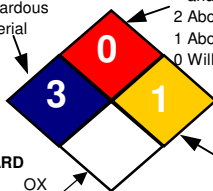




SECTION 1 - IDENTIFICATION

Manufacturer: Black Swan Manufacturing Co. 4540 W. Thomas Street Chicago, IL 60651-3318 Telephone: 1-800-252-5796 Fax: 1-773-227-3705 Web Site: www.blackswanmfg.com E-mail: info@blackswanmfg.com	For any transportation or medical chemical emergencies call: <p style="text-align: center;">INFOTRAC</p> <p style="text-align: center;">(800) 535-5053 <u>OR</u> (352) 323-3500</p> <p style="text-align: center;">24 hours per day - 7 days a week</p>
Product Name: <p style="text-align: center;">Dagger</p>	Recommended Use: For removal of lime, scale, concrete and rust from air conditioning equipment, refrigerator drains, etc.

SECTION 2 - HAZARD(S) IDENTIFICATION

<p style="text-align: center;">Label</p>  <p>Corrosive Env. Haz. Poison</p> <p>Harmful Irritant</p>	<p style="text-align: center;">NFPA</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="462 808 625 934"> <p>HEALTH HAZARD</p> <p>4 Deadly 3 Extreme Danger 2 Hazardous 1 Slightly Hazardous 0 Normal Material</p> </div> <div data-bbox="738 808 1079 955"> <p>FIRE HAZARD Flash Points</p> <p>4 Below 73°F (Boiling pt. below 100°F) 3 Below 73°F (Boiling pt. at/above 100°F) and/or at/above 73°F - not exceeding 100°F 2 Above 100°F, Not exceeding 200°F 1 Above 200°F 0 Will not burn</p> </div> <div data-bbox="787 997 1031 1123"> <p>INSTABILITY</p> <p>4 May detonate 3 Shock and heat may detonate 2 Violent chemical changes 1 Unstable if heated 0 Stable</p> </div> </div> <div style="text-align: center; margin: 10px 0;">  </div> <p>SPECIFIC HAZARD</p> <p>Oxidizer OX Use NO WATER W- Simple Asphyxiant SA</p>	<p style="text-align: center;">HMIS</p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: #000080; color: white;">HEALTH</td> <td style="text-align: center; font-weight: bold;">3</td> <td rowspan="3" style="vertical-align: top;"> 0 Minimal Hazard 1 Slight Hazard 2 Moderate Hazard 3 Serious Hazard 4 Severe Hazard </td> </tr> <tr> <td style="background-color: #FF0000; color: white;">FLAMMABILITY</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> <tr> <td style="background-color: #FFD700; color: black;">REACTIVITY</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> </table> <p style="text-align: center; margin-top: 10px;"> PPE H </p>	HEALTH	3	0 Minimal Hazard 1 Slight Hazard 2 Moderate Hazard 3 Serious Hazard 4 Severe Hazard	FLAMMABILITY	0	REACTIVITY	1
HEALTH	3	0 Minimal Hazard 1 Slight Hazard 2 Moderate Hazard 3 Serious Hazard 4 Severe Hazard							
FLAMMABILITY	0								
REACTIVITY	1								
<p style="text-align: center;">Health</p> <p>Acute Toxicity: Cat. 4 Skin Corrosion: Cat. 1 Eye Irritation: Cat. 2B Skin Sensitization: NO</p>	<p style="text-align: center;">Environmental</p> <p>Acute Toxicity: N/A Chronic Toxicity: N/A</p>	<p style="text-align: center;">Physical</p> <p>Flammability: N/A Other: N/A</p>							
<p style="text-align: center;">Hazardous Statement</p> <p>Danger. Poison! May be fatal if swallowed. Causes severe burns. Vapors harmful. May cause blindness.</p>	<p style="text-align: center;">Precautionary Statement</p> <p>Avoid contact with skin and eyes. Keep out of reach of children. Do not allow to be taken internally. Use only in a well ventilated are. Avoid breathing vapors.</p>								

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<u>Hazardous Chemicals</u>	<u>CAS #</u>	<u>EINECS#</u>	<u>Approx %</u>
HYDROGEN CHLORIDE	7647-01-0	231-595-7	35%
*Title III Section 313 Supplier Notification: This product contains toxic chemicals subject to the reporting requirement of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372. This information must be included in all MSDS's that are copied and distributed for this material.			

MATERIAL SAFETY DATA SHEET

SECTION 4 - FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If breathing is difficult, oxygen may be beneficial, if administered by a person trained in its use, preferably on a physician's advise. Ensure victim is completely at rest. Do not allow any physical exertion. Symptoms may be delayed up to 48 hours after exposure. Get immediate medical attention.

Skin: Immediately flush with lukewarm, gently flowing water for at least 20-30 minutes. Under running water, remove contaminated clothing and shoes. Get immediate medical attention. Completely decontaminate clothing and shoes before re-use.

Eyes: Flush immediately with lukewarm water for at least 20-30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye/lid tissue. If irritation persists, repeat flushing. Get immediate medical attention.

Ingestion: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. If milk is available, it may be given after the water has been given. If vomiting occurs spontaneously, keep airway clear and give more water. Get immediate medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES

<u>Extinguishing Media</u>	<u>Specific Hazards</u>	<u>Protective Equipment</u>										
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><u>Suitable</u></td> <td style="width: 50%;"><u>Unsuitable</u></td> </tr> <tr> <td>Water fog</td> <td>Hydrogen chloride gas</td> </tr> <tr> <td>Foam</td> <td>Hydrogen</td> </tr> <tr> <td>Dry Chemical</td> <td></td> </tr> <tr> <td>Carbon Dioxide</td> <td></td> </tr> </table>	<u>Suitable</u>	<u>Unsuitable</u>	Water fog	Hydrogen chloride gas	Foam	Hydrogen	Dry Chemical		Carbon Dioxide		<p>Contact with common metals may produce flammable, and potentially explosive hydrogen gas.</p>	<p>Self-contained breathing apparatus {(SCBA), MSHA/NIOSH}. Full protective gear.</p>
<u>Suitable</u>	<u>Unsuitable</u>											
Water fog	Hydrogen chloride gas											
Foam	Hydrogen											
Dry Chemical												
Carbon Dioxide												
<u>Special Firefighting Procedures</u>												
<p>Firefighters and others who might be exposed to products of combustion should wear (NIOSH approved) positive pressure self-contained breathing apparatus and full protective clothing. Neutralize with soda ash and slaked lime.</p>												

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Protective Equipment: None.

Emergency Procedures: None.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods for Cleaning-Up: Evacuate area, keep upwind until gas has dispersed. If necessary to enter spill area, wear approved full face respirators with acid cartridges. Wear acid resistant clothing.
Large Spills: Wear self contained breathing apparatus and full protective clothing including shoes. Build a dike around the spill. Neutralize with Lime or Soda Ash. Clean and dispose in accordance with Federal, State and Local regulations.

Other Precautions: None.

SECTION 7 - HANDLING AND STORAGE

<u>Handling</u>	<u>Storage</u>
<p>Do not get in eyes, on skin or on clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Do not mix with cyanides, sulfides or formaldehyde.</p>	<p>Store in original containers and away from heat. Keep containers closed when not in use. Store in a cool place. Keep away from heat, sparks and flames.</p>

MATERIAL SAFETY DATA SHEET

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Hazardous Components</u>	<u>OSHA Exposure Limits</u>	
HYDROGEN CHLORIDE	<u>ACGIH-TLV</u>	<u>OSHA-PEL</u>
	5 ppm	5 ppm

Personal Protective Equipment

Respiratory Protection: Full face respirator with HCL fumes cartridges for response to small spills. Self contained breathing apparatus.

Ventilation: Local ventilation is adequate.

Other Protective Equipment:

<u>Protective Gloves</u> Rubber/Plastic Gloves.	<u>Eyes and Face Protection</u> Chemical Safety Goggles OR Safety Glasses/Faceshield.	<u>Other Protective Equipment</u> None.
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Other Precautions: None.

Engineering Controls

None.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance: Light Yellow	Volatile by Volume: N/A
Odor: Pungent/Acid odor	Vapor Pressure: 35
Odor Threshold: N/A	Vapor Density: 1.27
pH: N/A	Relative Density: N/A
Melting/Freezing Point: N/A	Solubility: Complete
Boiling Point: 181 °F / -51 °F	Partition Coefficient: n-octanol/water: N/A
Boiling Range: N/A	Auto-ignition Temperature: N/A
Flash Point: N/A	Specific Gravity (H2O=1): 1.16
Evaporation Rate: > 1.0	Viscosity: N/A
Flammability: N/A	VOC: 0 g/l
Flammability Limits: LEL: N/A ; UEL: N/A	

SECTION 10 - STABILITY AND REACTIVITY

<u>Stability</u>	<u>Hazardous Polymerization</u>	<u>Conditions To Avoid</u>
Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>	May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	Open flames, sparks, and ignition sources. Very corrosive to most metals. Avoid heating to decomposition.
<u>Incompatible Materials</u>		
Strong oxidizers such as liquid chlorine, sodium or calcium hypochloride, pure oxygen, reducing agents, metals, bases, aldehydes, epoxides, explosives, acetylides, borides, carbides, silicides, cyanides, sulfides and phosphides.		<u>Hazardous Decomposition Products</u>
		Carbon monoxide, oxides or sulfur and other decomposition products may form from incomplete combustion. Heat can cause evolution of gaseous hydrogen chloride.

MATERIAL SAFETY DATA SHEET

SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Likely Routes of Exposure</u>	<u>Symptoms/Effects</u>	
Inhalation <input checked="" type="checkbox"/>	Corrosive and irritating to respiratory tract. Results in coughing, choking and inflammation of the respiratory tract. Will cause severe burns unless washed off immediately. Repeated skin contact may lead to dermatitis. Causes severe irritation and painful burns to the eyes and eye lids. Failure to irrigate the eyes immediately with copious amounts of water, could cause visual impairment and/or total loss of vision. Corrosive to mouth and stomach. Do not induce vomiting.	
Skin Contact <input checked="" type="checkbox"/>		
Eye Contact <input checked="" type="checkbox"/>		
Ingestion <input checked="" type="checkbox"/>		
Long-Term Effects:	Prolonged exposure to low level concentration of hydrochloric acid vapor may cause discoloration and erosion of teeth, bleeding of nose and gums, and ulcers of the nasal mucosa. It may aggravate asthma, bronchitis, emphysema, bronchial hyperactivity, skin allergies and eczema.	
Hazardous Components HYDROGEN CHLORIDE	Toxicity LD₅₀ Oral: 900 mg/Kg (rabbit)	LC₅₀ Inhalation: 5,666 ppm @ 30 min.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	This material is expected to be toxic to aquatic life.
Persistence & Degradability:	None.
Bioaccumulative Potential:	None.
Mobility in Soil:	None.
Other Adverse Effects:	None.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Shipping Information

Shipping Name:	Hydrochloric Acid, Solution	Exception to the rule: If the package that contains the hazardous material is in a small consumer size (Less than 1L) then the rules that apply to shipping hazardous materials do not apply. This is called an "Exception". This is classified as Consumer Commodity ORM-D.
Hazardous Class:	8	
I.D. Number:	UN1789	
Packing Group:	II	
Label Required:	Corrosive	
Marine Pollutant:	No	

SECTION 15 - REGULATORY INFORMATION

None.

SECTION 16 - OTHER INFORMATION

Disclaimer:	Revision Date:	JULY 2010
Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. Black Swan Manufacturing Co. urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents, and contractors of the information on the sheets.		