BLACK SWAN MFG. CO.

MATERIAL SAFETY DATA SHEET

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:

INFOTRAC

(800) 535-5053 OR (352) 323-3500

24 hours per day - 7 days a week

Product Name:

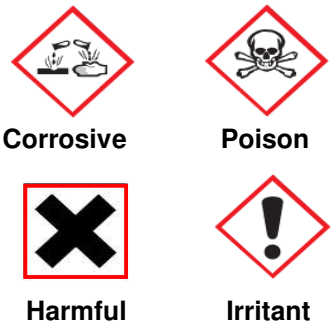
Heavy Duty Liquid Drain Pipe Opener

Recommended Use:

For cleaning clogged or sluggish drains.

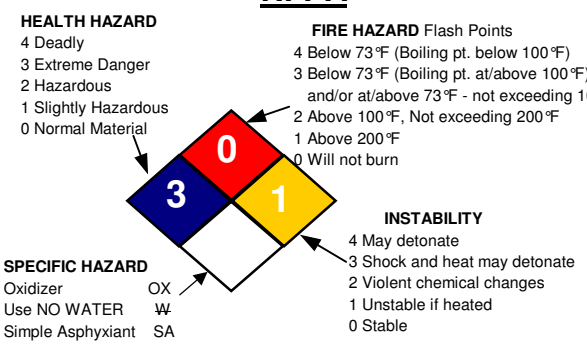
SECTION 2 - HAZARD(S) IDENTIFICATION

Label

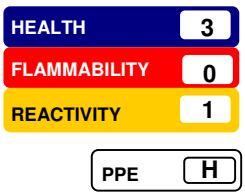


Corrosive — Poison — Harmful — Irritant

NFPA



HMIS



0 Minimal Hazard
1 Slight Hazard
2 Moderate Hazard
3 Serious Hazard
4 Severe Hazard

Health

Acute Toxicity:	Cat. 5
Skin Corrosion:	Cat. 1
Eye Irritation:	Cat. 2B
Skin Sensitization:	NO

Environmental

Acute Toxicity:	N/A
Chronic Toxicity:	N/A

Physical

Flammability:	N/A
Other:	N/A

Hazardous Statement

Poison! Causes severe burns.
Harmful if swallowed.
Danger! Contains Potassium Hydroxide and Sodium Hydroxide.

Precautionary Statement

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.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Chemicals	CAS #	EINECS#	Approx %
POTASSIUM HYDROXIDE	1310-58-3	215-181-3	20-30%
SODIUM HYDROXIDE	1310-72-2	215-185-5	20-30%

*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.

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SECTION 4 - FIRST-AID MEASURES

Inhalation: Remove from further exposure. Keep warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should administer oxygen. Seek immediate medical attention.

Skin: Remove contaminated clothing including shoes and immediately wash affected area with plenty of soap and water. Seek immediate medical attention. Wash contaminated clothing and shoes before reuse.

Eyes: Immediately flush eyes with plenty of water for two to three minutes. Remove any contact lenses and continue flushing for 15 minutes. Get immediate medical attention.

Ingestion: Wash out mouth with water, keep at rest. Seek immediate medical attention. DO NOT induce vomiting unless directed to do so by medical personnel.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media		Specific Hazards	Protective Equipment
Suitable	Unsuitable		
Water Spray Dry Chemical Standard Agents	---------	Sodium Hydroxide will react with metals such as aluminum, tin, and zinc to generate flammable and explosive hydrogen gas.	Self-contained breathing apparatus {(SCBA), MSHA/NIOSH}. Full protective gear.

Special Firefighting Procedures

Avoid direct contact of Sodium Hydroxide with water, as this can produce a violent exothermic reaction. Use water to cool containers exposed to fire. Contact with reactive metals may result may result in the generation of flammable gas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None.

Protective Equipment: None.

Emergency Procedures: None.

Environmental Precautions: Keep out of water sources and sewers.

Methods for Cleaning-Up: If possible, dike spill and mop or pump into plastic or lacquer lined drums, label "Corrosive" and store away from heat and out of direct sunlight. Residual may be neutralized with citric acid.

Other Precautions: None.

SECTION 7 - HANDLING AND STORAGE

Handling	Storage
Wear appropriate personal protective equipment when handling Sodium Hydroxide and Potassium Hydroxide.	Store in a dry place in accordance with 29 CFR 1910.106 and away from acids, metals, explosives, organic compounds and flammable materials. Do not store in containers made from tin, aluminum, zinc and alloys containing these metals.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA Exposure Limits

Hazardous Components	ACGIH-TLV	OSHA-PEL
POTASSIUM HYDROXIDE	2 mg/m3	N/A
SODIUM HYDROXIDE	2 mg/m3	3 mg/m3

Personal Protective Equipment

Respiratory Protection: Use NIOSH approved respirators to prevent overexposure.

Ventilation: Local ventilation is adequate.

Other Protective Equipment:

Protective Gloves	Eyes and Face Protection	Other Protective Equipment
Neoprene/Chemical Resistant Gloves.	Chemical Safety Goggles and Face Shield.	Chemical Suit, Rubber Boots.

Other Precautions: None.

Engineering Controls

Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. Cleanse skin thoroughly after contact, before meals and at end of work period. Impervious chemical resistant clothing should be worn.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Clear	**Volatile by Volume:**	N/A
Odor:	Odorless	**Vapor Pressure:**	N/A
Odor Threshold:	N/A	**Vapor Density:**	N/A
pH:	14	**Relative Density:**	N/A
Melting/Freezing Point:	N/A / N/A	**Solubility:**	Complete
Boiling Point:	265°F	**Partition Coefficient: n-octanol/water:**	N/A
Boiling Range:	N/A	**Auto-ignition Temperature:**	N/A
Flash Point:	N/A	**Specific Gravity (H20=1):**	1.44
Evaporation Rate:	N/A	**Viscosity:**	N/A
Flammability:	N/A	**VOC:**	0 g/l
Flammability Limits:	LEL: N/A ; UEL: N/A		

SECTION 10 - STABILITY AND REACTIVITY

Stability

Stable	Unstable
☑	☐

Hazardous Polymerization

May Occur	Will Not Occur
☐	☑

Conditions To Avoid

Mixing with water, acid, or incompatible materials can cause splattering and release of large amounts of heat.

Incompatible Materials

Acids, aluminum, tin, zinc, and alloys containing these metals, iron, copper, wool, leather, clothing materials, organic chemicals such as nitrocarbons and halogenated hydrocarbons, carbohydrates, phosphorous, explosives and organix peroxides.

Hazardous Decomposition Products

Carbon monoxide with carbohydrates, hydrogen with aluminum, tin and zinc.

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SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure		Symptoms/Effects
Inhalation	☑	Causes respiratory irritation which may develop into serious lung injury depending upon the degree of exposure.
Skin Contact	☑	Corrosive. Can cause severe skin burns. Irritation may not be immediately painful. Greater exposure results in severe burns with scarring.
Eye Contact	☑	Corrosive. Can cause severe eye burns. Contact results in immediate pain and can cause permanent eye damage including blindness.
Ingestion	☑	Corrosive. Contact will cause severe burns of the mouth, throat and stomach.

Long-Term Effects: N/A

Hazardous Components	Toxicity LD_{50}	LC_{50}
POTASSIUM HYDROXIDE	Oral: 365 mg/kg (rat)	N/A
SODIUM HYDROXIDE	Oral: 500 mg/kg (rabbit)	N/A

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: None.
Persistance & 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: Sodium Hydroxide, Solution
Hazardous Class: 8
I.D. Number: UN1824
Packing Group: II
Label Required: Corrosive
Marine Pollutant: No

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.

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.