













SECTION 1 - IDENTIFICATION

Manufacturer: Black Swan Mfg. Co. 4540 W. Thomas St. Chicago, IL 60651-3318 Tel.: 800-252-5796 Fax: 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 OR (352) 323-3500</p> <p style="text-align: center;">24 hours per day - 7 days a week</p>
Product Name: Liquid Drain Pipe Opener	Recommended Use: For cleaning clogged or sluggish drains. Restriction of use: Do not mix or add any substance to this product.

SECTION 2 – HAZARD(S) IDENTIFICATION

<p>Labels</p>  <p>Toxic Corrosive</p> <p>Signal Word Danger</p> <p>HMS</p> <table border="1"> <tr><td>HEALTH</td><td>3</td></tr> <tr><td>FLAMMABILITY</td><td>0</td></tr> <tr><td>REACTIVITY</td><td>1</td></tr> </table>	HEALTH	3	FLAMMABILITY	0	REACTIVITY	1	<p>NFPA</p> <table border="1"> <tr> <td> HEALTH HAZARD 4 – Deadly 3 – Extreme Danger 2 – Hazardous 1 – Slight Hazardous 0 – Normal Material </td> <td style="text-align: center;">  </td> <td> FIRE HAZARD Flash Points 4 – Below 73°F 3 – Below 100°F 2 – Above 100°F, Not exceeding 200°F 1 – Above 200°F 0 – Will not burn </td> </tr> <tr> <td> SPECIFIC HAZARD Oxidizer OX Acid ACID Alkali ALK Corrosive COR Use NO WATER  Radioactive  </td> <td></td> <td> REACTIVITY 4 – May detonate 3 – Shock and heat may detonate 2 – Violent chemical change 1 – Unstable if heated 0 – Stable </td> </tr> </table>	HEALTH HAZARD 4 – Deadly 3 – Extreme Danger 2 – Hazardous 1 – Slight Hazardous 0 – Normal Material		FIRE HAZARD Flash Points 4 – Below 73°F 3 – Below 100°F 2 – Above 100°F, Not exceeding 200°F 1 – Above 200°F 0 – Will not burn	SPECIFIC HAZARD Oxidizer OX Acid ACID Alkali ALK Corrosive COR Use NO WATER  Radioactive 		REACTIVITY 4 – May detonate 3 – Shock and heat may detonate 2 – Violent chemical change 1 – Unstable if heated 0 – Stable	<p>GHS Classification</p> <table border="1"> <tr> <td> Health Acute Toxicity: Oral-Cat.3/Dermal-Cat.4 Skin Irritation: Cat.1B Eye Irritation: Cat.1 Skin Sensitization: NO </td> <td> Environmental Acute Aquatic Toxicity: Not Established Chronic Aquatic Toxicity: Not Established </td> </tr> <tr> <td colspan="2" style="text-align: center;"> Physical Flammability: Cat. 2 </td> </tr> </table>	Health Acute Toxicity: Oral-Cat.3/Dermal-Cat.4 Skin Irritation: Cat.1B Eye Irritation: Cat.1 Skin Sensitization: NO	Environmental Acute Aquatic Toxicity: Not Established Chronic Aquatic Toxicity: Not Established	Physical Flammability: Cat. 2	
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<p>Hazardous Statements</p> <p>H302: Harmful if swallowed H314: Causes severe skin burns and eye damage</p>	<p>Precautionary Statements</p> <p>P102: Keep out of reach of children P103: Read label before use P262: Do not get in eyes, on skin, or on clothing P264: Wash thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection</p>																	

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemicals	CAS#	EINECS#	REACH Pre-registration Number	Approx %
POTASSIUM HYDROXIDE	1310-58-3	215-181-3	N/A	10-20%
SODIUM HYDROXIDE	1310-72-2	215-185-5	N/A	10-20%

*Unlisted ingredients are not classified as hazardous according to OSHA 1910.1200.

SECTION 4 – FIRST-AID MEASURES

<p>Inhalation: Remove victim into fresh air. Call a physician.</p> <p>Skin: Flood with water for 15 minutes then wash with vinegar.</p> <p>Eyes: Flush with water for 15 minutes. If irritation persists, get medical attention. .</p> <p>Ingestion: Drink large quantities of water. Follow with citrus fruit juice, if available. Do not induce vomiting unless directed to do so by medical personnel.</p>

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SECTION 5 – FIRE-FIGHTING MEASURES

Fire Hazard: Sodium Hydroxide will react with metals such as Aluminum, tin, and zinc to generate flammable and explosive hydrogen gas.

Combustion Products: None known.

Extinguishing Media: Dry Chemical, Carbon Dioxide, Water Spray

Unsuitable Extinguishing Media: None known.

Protective Equipment: Self-contained breathing apparatus {(SCBA), MSHA/NIOSH}. Full protective gear.

Special Fire Fighting Procedures: Avoid contact of Sodium Hydroxide with water, as this can produce a violent exothermic reaction. Contact with reactive metals may result in the generation of flammable gas. Evacuate enclosed areas, stay upwind. Closed or confined quarters require self-contained breathing apparatus, positive pressure hose masks or airline masks. Use water spray to cool containers, to flush spills from sources of ignition and to disperse vapors.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Prevent contact with skin or eyes. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high.

Protective Equipment: Wear suitable respiratory protective equipment.

Emergency Procedures: Remove all sources of ignition and ventilate area. For leaks, stop leak if it can be done safely. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

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

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 direct sunlight. Residual may be neutralized with citric acid.

SECTION 7 – HANDLING AND STORAGE

<u>Handling</u>	<u>Storage</u>
Use entire contents of container, rinse thoroughly and then dispose of container in accordance with the local state or federal regulations.	Store at room temperature. Keep container closed when not in use. Incompatible Materials: Acids, metals, explosives, organic compounds and flammable materials. Do not store in containers made from tin, aluminum, zinc and alloys containing these materials.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Hazardous Chemicals</u>	<u>Exposure Limits</u>		
	<u>ACGIH-TLV</u>	<u>ACGIH-STEL</u>	<u>OSHA-PEL</u>
POTASSIUM HYDROXIDE	2mg/m ³	N/A	N/A
SODIUM HYDROXIDE	2mg/m ³	N/A	2mg/m ³

Engineering Controls: A source of running water to flush or wash the eyes and skin in case of contact. Use local exhaust as needed.

Ventilation: Local ventilation is adequate. Use only explosion proof ventilation equipment.

Personal Protective Equipment – Respiratory: Atmospheric levels should be maintained below established exposure limits. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

Personal Protective Equipment – Skin: Prevent contact with skin. Neoprene/Chemical resistant gloves. Chemical suit, rubber boots.

Personal Protective Equipment – Eyes: Chemical safety goggles and/or face shield.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Appearance: Clear Liquid	Flash Point: Not Established	Vapor Pressure: 1.5 mm Hg @ 20°C
Odor: Odorless	Specific Gravity: 1.44	Flammability: Not Established
pH: 14.0 (Aqueous solution: 5%)	Solubility (H2O): Complete	Flammability Limits: LEL – Not Established
Melting Point: Not Established	Evaporation Rate: Not Established	UEL – Not Established
Freezing Point: Not Established	Vapor Density: Not Established	
Boiling Point: 265°F	VOC: 0 g/l	

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SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.

Hazardous polymerization: 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 organic peroxides.

Hazardous decomposition products: Potassium and Sodium Oxides form under fire conditions. Carbon Monoxide with Carbohydrates, Hydrogen with Aluminum, Tin and Zinc.

SECTION 11 – TOXICOLOGICAL INFORMATION

<u>Hazardous Chemicals</u>	<u>Toxicity</u>	<u>LC₅₀</u>
POTASSIUM HYDROXIDE	Oral: 365 mg/kg (rat)	N/A
SODIUM HYDROXIDE	Oral: 500 mg/kg (rabbit)	N/A

Likely Routes of Exposure: Inhalation, Skin Contact, Eye Contact and Ingestion.

Symptoms and Effect - 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 serious 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 Effect: Repeated or prolonged skin contact would be expected to cause drying, cracking, and inflammation of the skin (dermatitis) and possible inflammation of the respiratory tract.

Pre-Existing Conditions: None known.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Mosquito fish: LC50=125mg/L 37 wt. % solution of Sodium Hydroxide.

Persistence & Degradability: Yes.

Bioaccumulative Potential: None known.

Mobility in soil: In normal use, emission of Volatile Organic Compounds (VOC's) to the air takes place, typically at a rate of ≤ 0 g/l.

SECTION 13 – DISPOSAL CONSIDERATION

Dispose of product or container in accordance with federal, state or 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 Limited Quantity.

SECTION 15 – REGULATORY INFORMATION

Precautionary Label Information: Toxic, Corrosive

Risk Phrases: R36/37-Irritant to eyes and respiratory system. R66-Repeated exposure may cause skin dryness or cracking.

Safety Phrases: S2-Keep out of reach of children. S9-Keep container in a well-ventilated place. S25-Avoid contact with eyes. S26-In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 16 – OTHER INFORMATION

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 Mfg. 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.

DATE: 01/01/2021