

BOTANIC PLANET CANADA INC.

SAFETY DATA SHEET (SDS / MSDS)

Sodium Hydroxide 99% Min.

SECTION 1. IDENTIFICATION

Product Identifier: Sodium Hydroxide (solid)

Other Names: Caustic Soda Solid; Lye; Sodium Hydrate Solid

CAS No.: 1310-73-2

Recommended Use: Laboratory and industrial use.

Supplier: Botanic Planet Canada Inc., 2 Bram Court, Unit #3-4, Brampton, Ontario, L6W 3R6, Canada

Email: info@botanicplanet.ca **Website:** www.botanicplanet.ca

Emergency: CANUTEC Canada, 613-996-6666 (24 hours)

SECTION 2. HAZARD IDENTIFICATION

Classified according to WHMIS 2015 and US HCS 2012.

Classification: Skin Corrosion - Category 1A; Serious Eye Damage - Category 1.

Signal Word: DANGER

Hazards: May be corrosive to metals. Causes severe skin burns and eye damage. Harmful if swallowed. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

Precautions: Wear protective gloves/protective clothing and eye/face protection. Avoid breathing dust. If inhaled, move to fresh air. If swallowed, rinse mouth; do not induce vomiting. If in eyes, rinse cautiously with water for several minutes and continue rinsing. If on skin, wash with plenty of water. Immediately call a poison centre or doctor.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Specification	COA Result
Sodium Hydroxide (NaOH)	1310-73-2	99.0% Min.	99.01%
Sodium Carbonate (Na ₂ CO ₃)	497-19-8	0.5% Max.	0.46%
Sodium Chloride (NaCl)	7647-14-5	0.03% Max.	0.02%
Iron Oxide (Fe ₂ O ₃)	1309-37-1	0.005% Max.	0.0018%

SECTION 4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Skin: Avoid direct contact. Immediately rinse with lukewarm, gently flowing water for at least 60 minutes. Remove contaminated clothing. Obtain urgent medical attention.

Eyes: Immediately rinse cautiously with lukewarm, gently flowing water for at least 60 minutes while holding eyelids open. Remove contact lenses if easy to do. Obtain immediate medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

Important Symptoms: Severe irritation or burns to the nose, throat, lungs, skin, eyes, mouth, throat and stomach may occur.

SECTION 5. FIRE-FIGHTING MEASURES

Not combustible. Use extinguishing media suitable for the surrounding fire. Do not use carbon dioxide or agents that smother flames where incompatible. Heated containers may rupture violently. Contact with certain metals may release flammable hydrogen. Fire-fighters should use suitable chemical protective clothing and positive-pressure SCBA where necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Restrict access to the area. Wear appropriate personal protective equipment. Avoid dust generation. Prevent entry into sewers, soil and waterways. Sweep or shovel dry material into a suitable container for recycling or disposal. Neutralization and cleanup should be performed carefully by trained personnel.

SECTION 7. HANDLING AND STORAGE

Avoid direct contact and breathing dust. Wear appropriate PPE. Never add water rapidly to concentrated sodium hydroxide; addition to water can generate substantial heat. Keep containers tightly closed. Store cool, dry and well ventilated, away from incompatible materials. Protect from moisture.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit: ACGIH TLV ceiling 2 mg/m³; OSHA ceiling 2 mg/m³.

Engineering Controls: Use local exhaust or laboratory fume hood where exposure may occur.

Eye/Face: Chemical safety goggles and face shield when contact is possible.

Skin: Chemical-resistant gloves, protective clothing, apron and boots as appropriate.

Respiratory: Where required, use a NIOSH-approved particulate respirator appropriate to the exposure.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White solid / pellets

Odour: Odourless

pH: Approximately 14 (5% solution)

Melting Point: Approximately 323 C

Boiling Point: Approximately 1390 C

Relative Density: Approximately 2.13

Solubility: Very soluble in water; dissolution is strongly exothermic.

Flash Point: Not applicable

Physical State: Solid

SECTION 10. STABILITY AND REACTIVITY

Normally stable when kept dry. Reacts strongly with water/moisture with release of heat. Avoid moisture and dust generation. Incompatible with strong acids, certain oxidizing agents, acid anhydrides, ketones, ammonia, aldehydes and some halogenated compounds. Contact with some metals may generate hydrogen gas.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure include inhalation, skin and eye contact, and ingestion. Sodium hydroxide is corrosive to skin and can cause serious eye damage. Inhaled dust or mist can severely irritate the respiratory tract. Ingestion can cause severe burns to the mouth, throat and stomach. Repeated skin exposure may cause dermatitis. Sodium hydroxide is not listed as a carcinogen by IARC, ACGIH, NTP or OSHA in the supplied source SDS.

SECTION 12. ECOLOGICAL INFORMATION

Specific ecological data are not provided in the supplied source SDS. High concentrations may be harmful to aquatic life due to strong alkalinity. Prevent uncontrolled release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable federal, provincial and local regulations. Neutralization should only be carried out by trained personnel using an appropriate controlled procedure. Do not discharge concentrated material to sewers or waterways.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Class	Packing Group
US DOT	UN1823	Sodium hydroxide, solid	8	II
Canadian TDG	UN1823	Sodium hydroxide, solid	8	II

SECTION 15. REGULATORY INFORMATION

Canada: Sodium hydroxide is listed on the Domestic Substances List (DSL).

USA: Sodium hydroxide is listed on the TSCA Inventory.

Users are responsible for determining all regulatory requirements applicable to their specific use and jurisdiction.

SECTION 16. OTHER INFORMATION

This SDS has been recreated for Botanic Planet Canada Inc. using the supplied Sodium Hydroxide MSDS as the safety-data basis and the current COA values for product composition: NaOH 99.01%, Na₂CO₃ 0.46%, NaCl 0.02%, and Fe₂O₃ 0.0018%.

Disclaimer & Caution: Please refer to all relevant technical information specific to the product prior to use. The information is provided in good faith from sources considered reliable; however, no representation is made as to completeness or accuracy. Users must exercise independent judgment and comply with all applicable laws and regulations. Botanic Planet Canada Inc.'s liability is limited to the value of the goods and excludes consequential loss. Jurisdiction is limited to the Province of Ontario.