

SODIUM HYDROXIDE FLAKES.

SECTION 1: PRODUCT IDENTIFICATION

Product Name: SODIUM HYDROXIDE FLAKES.

Product Code: 779.

CAS#: 1310-73-2.

Synonym: Caustic Soda; Soda Lye.

Chemical Name: Sodium Hydroxide.

Chemical Formula: NaOH.

Formula Weight: 40.00

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Sodium Hydroxide.

Toxicological Data on Ingredients:

Corrosive to metals (Category 1), H290.

Skin corrosion (Category 1A), H314, R34.

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Potential Acute Health Effects: Severe eye and skin irritation. Causes skin burns. May cause corneal damage. May cause deep penetrating ulcers of the skin. May cause abdominal pain, nausea, vomiting, diarrhea.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not Available.

MUTAGENIC EFFECTS: Not Available.

TERATOGENIC EFFECTS: Not Available.

DEVELOPMENTAL TOXICITY: Not Available. Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for

at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

Serious Inhalation: Not Available..



Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

SECTION 5: FIRE FIGHTING MEASURES

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not Available.

Flash Points: Not Applicable.

Flammable Limits: Not Applicable.

Products of Combustion: Emits Na₂O fumes when heated to decomposition.

Fire Hazards in Presence of Various Substances: Not Applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not Available.

Fire Fighting Media and Instructions:

SMALL FIRE: Not applicable.

LARGE FIRE: Not applicable.

Special Remarks on Fire Hazards: Sodium carbonate can ignite and burn fiercely in contact with fluoride. Sodium Carbonate in contact with fluorine decomposed at ordinary temperature with incandescence.

Special Remarks on Explosion Hazards: Reacts explosively with red-hot aluminum metal. Sodium carbonate + ammonia in arabic gum solution will explode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION 7: HANDLING AND STORAGE

Precautions:

Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses, Lab coat, Dust respirator, Gloves. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, Full suit, Dust respirator, Boots, Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not Available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: White, deliquescent flakes.
Odour	: Not available
Taste	: Not available
Molecular Weight	: Not available
Colour	: Not available
pH	: Not available
Boiling Point	: Not available
Melting Point	: Not available
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available
Vapor Density	: Not available
Volatility	: Not Available
Odor Threshold	: Not Available
Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Soluble in water.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, moisture.

Incompatibility with various substances: Reactive with acids. Slightly reactive to reactive with moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Hygroscopic. Combines with water with evolution of heat. Incompatible with phosphorus pentoxide, lithium, fluorine, fluoride, ammonia + silver nitrate, 2,4,6-trinitrotoluene, ammonia, acids, sodium sulfide + water, hydrogen peroxide, red hot aluminum metal, sodium sulfide, zinc, calcium hydroxide. Sodium Carbonate is decomposed by acids with effervescence.

Special Remarks on Corrosivity: Hot concentrated solutions of sodium carbonate are mildly corrosive to steel.

Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion.

Toxicity to Animals:

LD₅₀: Oral - rat - 4090 mg/kg

LC₅₀: Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h.



EC₅₀ Daphnia magna (Water flea) - 265 mg/l - 48 h

Chronic Effects on Humans: May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: LDL [Man] – Oral; Dose: 714 mg/kg.

Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects based on animal test data.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: ECOLOGICAL INFORMATION

BOD and COD: Not Available.

Products of Biodegradation: The product itself and its products of degradation are not toxic.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not Available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name

ADR/RID:

IMDG:

IATA:

Transport hazard class (es):

ADR/RID:

IMDG:

IATA:

Packaging group:

ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID:

IMDG Marine pollutant:

IATA:

SECTION 15: OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Sodium Hydroxide.

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC); CLASS E: Corrosive solid.

DSCL (EEC): R34.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 1

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0



Reactivity: 1

Specific hazard: Not Available.

Protective Equipment: Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

SECTION 16: OTHER INFORMATION

References: Not available.

Other Special Considerations: Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

