

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Sodium Hydroxide Pellets, ACS, NF/FCC, EP, JP, BP

Other Generic Names: Caustic Soda; Lye

Intended Use of the Product

Food and Pharmaceutical Ingredient. Food additive, acid neutralization, industrial use. For professional use only.

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC.

155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5

For SDS Info: (416) 496-5856

www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290

Skin Corr. 1A H314

Eye Dam. 1 H318

Aquatic Acute 3 H402

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

:



GHS05

Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H402 - Harmful to aquatic life

Precautionary Statements (GHS-US)

: P234 - Keep only in original container.

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	Product identifier	% (w/w)	Classification (GHS-US)
Sodium hydroxide	(CAS No) 1310-73-2	60 - 100	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Disodium carbonate	(CAS No) 497-19-8	< 0.1 0.1 - 1 1 - 5	Eye Irrit. 2A, H319
Water	(CAS No) 7732-18-5	< 0.1 0.1 - 1 1 - 5	Not classified

*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition. The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. Causes serious eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Skin Contact: Causes severe skin burns. Redness, pain, blisters, permanent damage.

Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva. Can cause blindness.

Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

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SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Not explosive, but may release hydrogen gas on contact with some metals.

Reactivity: Reacts exothermically with some acids. Contact with metals may evolve flammable hydrogen gas. Reacts violently with water.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition. Do not allow run-off from firefighting to enter drains or water courses. Water may be ineffective to fight fire, but water should be used to keep exposed containers cool.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Corrosive vapors.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize the spill. Recover the product mechanically by vacuuming, shoveling or sweeping. Minimize generation of dust. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. May form combustible dust concentrations in air.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Storage areas should be periodically checked for corrosion and integrity.

Incompatible Materials: Strong acids. Strong oxidizers. Metals. Aluminum. Magnesium. Zinc. Ammonium salts.

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Specific End Use(s) Food and Pharmaceutical Ingredient. Food additive, acid neutralization, industrial use. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Sodium hydroxide (1310-73-2)		
Mexico	OEL Ceiling (mg/m ³)	2 mg/m ³
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
Alberta	OEL Ceiling (mg/m ³)	2 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	2 mg/m ³
Manitoba	OEL Ceiling (mg/m ³)	2 mg/m ³
New Brunswick	OEL Ceiling (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	2 mg/m ³
Nova Scotia	OEL Ceiling (mg/m ³)	2 mg/m ³
Nunavut	OEL Ceiling (mg/m ³)	2 mg/m ³
Northwest Territories	OEL Ceiling (mg/m ³)	2 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL Ceiling (mg/m ³)	2 mg/m ³
Québec	PLAFOND (mg/m ³)	2 mg/m ³
Saskatchewan	OEL Ceiling (mg/m ³)	2 mg/m ³
Yukon	OEL Ceiling (mg/m ³)	2 mg/m ³

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective goggles. Face shield. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Opaque white solid
Odor	: None
Odor Threshold	: Not available
pH	: 13.5 (0.1M Solution)
Melting Point	: 360 °C (680.00 °F)
Freezing Point	: Not applicable
Boiling Point	: 1320 °C (2408.00 °F)
Flash Point	: Not Flammable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available

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Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: Not applicable
Relative Vapor Density at 20 °C	: Not applicable
Relative Density	: Not applicable
Specific Gravity	: 2.044
Solubility	: 100 g/100 g water at 20°C.
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not applicable
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reacts exothermically with some acids. Contact with metals may evolve flammable hydrogen gas. Reacts violently with water.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials. Heat, hot surfaces, sparks, open flames, and other ignition sources.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Metals. May be corrosive to metals. Aluminum. Magnesium. Zinc. Ammonium salts.

Hazardous Decomposition Products: Thermal decomposition generates : Corrosive vapors. Carbon oxides (CO, CO₂). Sodium oxides. Hydrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: 13.5 (0.1M Solution)

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 13.5 (0.1M Solution)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Skin Contact: Causes severe skin burns. Redness, pain, blisters, permanent damage.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva . Can cause blindness.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Disodium carbonate (497-19-8)	
LD50 Oral Rat	4090 mg/kg

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LC50 Inhalation Rat (mg/l)	2300 mg/m ³ (Exposure time: 2 h)
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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life.

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l
Disodium carbonate (497-19-8)	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Persistence and Degradability

Sodium Hydroxide Pellets, ACS, NF/FCC, EP, JP, BP	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Sodium Hydroxide Pellets, ACS, NF/FCC, EP, JP, BP	
Bioaccumulative Potential	Not established.
Disodium carbonate (497-19-8)	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : SODIUM HYDROXIDE, SOLID
Hazard Class : 8
Identification Number : UN1823
Label Codes : 8
Packing Group : II
ERG Number : 154



14.2 In Accordance with IMDG

Proper Shipping Name : SODIUM HYDROXIDE, SOLID
Hazard Class : 8
Identification Number : UN1823
Packing Group : II
Label Codes : 8
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B



14.3 In Accordance with IATA

Proper Shipping Name : SODIUM HYDROXIDE, SOLID
Packing Group : II
Identification Number : UN1823
Hazard Class : 8
Label Codes : 8
ERG Code (IATA) : 8L



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14.4 In Accordance with TDG

Proper Shipping Name : SODIUM HYDROXIDE, SOLID
Packing Group : II
Hazard Class : 8
Identification Number : UN1823
Label Codes : 8



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Sodium hydroxide (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Disodium carbonate (497-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Sodium hydroxide (1310-73-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

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WHMIS Classification	Class E - Corrosive Material
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Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification	Class E - Corrosive Material
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Disodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 05/01/15

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

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GHS Full Text Phrases:

Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H402	Harmful to aquatic life

Party Responsible for the Preparation of This Document

CHEMTRADE LOGISTICS, INC.

For SDS Info: (416) 496-5856

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade North America SDS Template