# SAFETY DATA SHEET SPECTRUM®



Revision date 28-January-2022

**Revision Number** 4

## 1. Identification

**Product identifier** 

Product Name Sodium Hydroxide, pellets, technical

Other means of identification

Product Code(s) S1238

UN/ID no UN1823

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

**Supplier Address** 

Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

## Classification

Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

## Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

# Danger

#### Hazard statements

Harmful in contact with skin Causes severe skin burns and eye damage May be corrosive to metals



Appearance pellets or flakes

Physical state Solid

**Odor** No information available

#### **Precautionary Statements - Prevention**

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep only in original container

#### **Precautionary Statements - Response**

Specific treatment (see .? on this label)

Immediately call a POISON CENTER or doctor

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor

Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Absorb spillage to prevent material damage

## **Precautionary Statements - Storage**

Store locked up.

Store in corrosive resistant/ .? container with a resistant inner liner

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other information

No information available.

# 3. Composition/information on ingredients

#### Substance

Chemical name	CAS No	Weight-%	Trade secret
Sodium Hydroxide	1310-73-2	100	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

## **Description of first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get immediate medical advice/attention.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get immediate medical

advice/attention.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use

barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

# 5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors.

Hazardous combustion products Sodium oxides.

**Explosion data** 

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

# 7. Handling and storage

## Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated

clothing and wash before reuse.

## Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

# 8. Exposure controls/personal protection

#### Control parameters

Exposure Limits

	Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Γ	Sodium Hydroxide	No data available	2 mg/m³ TWA	-
1	1310-73-2			

#### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Face protection shield.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance pellets or flakes

**Color** White

Odor No information available
Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

рH no data available None known Melting point / freezing point 323 °C / 613.4 °F None known 1388 °C / 2530.4 °F Boiling point / boiling range None known no data available Flash point None known None known no data available **Evaporation rate** Flammability (solid, gas) no data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Vapor density no data available None known Relative density None known 2.13 Water solubility Freely soluble in water None known None known Solubility(ies) Soluble in Alcohol None known No data available **Partition coefficient Autoignition temperature** no data available None known **Decomposition temperature** None known

Kinematic viscosity no data available None known
None known

Dynamic viscosity

No data available

Other information

Explosive properties
Oxidizing properties
No information available
No information available
No information available

Molecular weight 40.0

VOC Content (%)

Liquid Density

Bulk density

No information available
No information available
No information available

# 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

**Incompatible materials** Oxidizing agent. Acids. Bases.

Hazardous decomposition products None known based on information supplied.

## 11. Toxicological information

Information on likely routes of exposure

Product Information .

**Inhalation** Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

None known

Pulmonary edema can be fatal.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Corrosive to the eyes and may cause severe damage

including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns. May be absorbed through the skin in harmful amounts.

Harmful in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity** 

**Numerical measures of toxicity** 

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydroxide 1310-73-2	325 mg/kg ( Rat )	1350 mg/kg (Rabbit)	-

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes.

Causes burns.

Respiratory or skin sensitization

Germ cell mutagenicity

No information available. No information available.

Reproductive toxicity No information available.

STOT - single exposure STOT - repeated exposure Target organ effects

No information available. No information available. respiratory system, Eyes, Skin.

ellects respiratory system, Lyes, c

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium Hydroxide	-	LC50: =45.4mg/L (96h,	-	40.4 mg/L EC50
1310-73-2		Oncorhynchus mykiss)		Ceriodaphnia sp. 48h

Persistence and degradability Bioaccumulation

No information available. Inherently biodegradable.

# 13. Disposal considerations

## Waste treatment methods

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

DOT

products

UN/ID no UN1823

Proper Shipping Name: Sodium hydroxide, solid

Hazard class 8
Packing group:

Special ProvisionsIB8, IP2, IP4, T3, TP33Marine PollutantSevere Marine Pollutant

**Description:** UN1823, Sodium hydroxide, solid, 8, II

**Emergency Response Guide** 154

Number

**TDG** 

**UN-No:** UN1823

Proper Shipping Name: Sodium hydroxide, solid

Hazard class 8
Packing Group: ||

**Description:** UN1823, Sodium hydroxide, solid, 8, II

MEX

**UN-No** UN1823

Proper Shipping Name Sodium hydroxide, solid

Hazard class 8
Packing Group ||

**Description** UN1823, Sodium hydroxide, solid, 8, II

ICAO (air)

**UN-No:** UN1823

Proper Shipping Name: Sodium hydroxide, solid

Hazard class 8
Packing Group:

**Description:** UN1823, Sodium hydroxide, solid, 8, II

<u>IATA</u>

UN number UN1823

Proper Shipping Name: Sodium hydroxide, solid

Transport hazard class(es) 8
Packing group | |

**Description:** UN1823, Sodium hydroxide, solid, 8, II

**IMDG** 

UN number UN1823

Proper shipping name Sodium hydroxide, solid

Transport hazard class(es) 8
Packing group II
EmS-No F-A, S-B
Marine pollutant NP1

**Description** UN1823, Sodium hydroxide, solid, 8, II

RID

UN number UN1823

Proper Shipping Name: Sodium hydroxide, solid

Transport hazard class(es) 8
Packing group II
Classification code C6

**Description:** UN1823, Sodium hydroxide, solid, 8, II

Labels 8

**ADR** 

UN number 1823

Proper Shipping Name: Sodium hydroxide, solid

Transport hazard class(es) 8
Packing group II
Classification code C6
Tunnel restriction code (E)

**Description:** 1823, Sodium hydroxide, solid, 8, II, (E)

Labels 8

**ADN** 

UN/ID No UN1823

Proper shipping name Sodium hydroxide, solid

Transport hazard class(es) 8
Packing Group II
Classification code C6

**Description** UN1823, Sodium hydroxide, solid, 8, II

Hazard label(s) 8
Limited quantity (LQ) 1 kg
Equipment Requirements PP, EP

# 15. Regulatory information

#### **International Inventories**

TSCA Complies

DSL/NDSL Complies EINECS/ELINCS Complies

**ENCS This product complies with ENCS: IECSC**This product complies with China:

**KECL** Complies **PICCS** Complies

AICS All the constituents of this material are listed on the Australian Inventory of Chemical

Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

## **US Federal Regulations**

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

## SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium Hydroxide	1000 lb final RQ	-
1310-73-2	454 kg final RQ	

## **US State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## **U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium Hydroxide	1706	Present	Environmental hazard
1310-73-2			

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

NFPA

Health hazards 3 Flammability 0

Instability 0

Physical and chemical properties -

HMIS

Health hazards 3
Flammability 0
Physical hazards 0
Personal protection X

## Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

## Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 28-January-2022 Revision Note 28-January-2022 No information available.

**Disclaimer** 

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**