

# Scientific Documentation

## **Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM)**

Not appropriate for regulatory submission.

Please visit [www.spectrumchemical.com](http://www.spectrumchemical.com) or contact Tech Services for the most up-to-date information contained in this information package.

Spectrum Chemical Mfg Corp  
769 Jersey Avenue  
New Brunswick, NJ 08901  
Phone 732.214.1300



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# Specification for Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM) (S9405)

Item Number	S9405
Item	Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM)
CAS Number	1310-73-2
Molecular Formula	NaOH
Molecular Weight	40.00
MDL Number	
Synonyms	Soda Lye ; Caustic Soda

Test	Specification	
	Min	Max
Assay (Total Alkali including Max. 3.0% Na <sub>2</sub> CO <sub>3</sub> , NF)	95.0	100.5 %
ASSAY (JP)	95.0 %	
Assay (Total Alkali; as NaOH, FCC)	95.0	100.5 %
ASSAY (EP)	97.0	100.5 %
Content of Sodium (NF)	54.0	59.8 %
CLARITY AND COLOR OF SOLUTION (JP)	Clear and colorless	
APPEARANCE OF SOLUTION (EP)	Clear and colorless	
Insoluble Substances and Organic Matter (FCC, NF)	TO PASS TEST	
POTASSIUM (JP)	TO PASS TEST	
CONTENT OF POTASSIUM (NF)		0.5 %
CHLORIDE (Cl, EP)		50 ppm
CHLORIDE (Cl, JP)		50 ppm
SULFATE (SO <sub>4</sub> , EP)		50 ppm
CARBONATE (as Na <sub>2</sub> CO <sub>3</sub> , FCC)		3.0 %
SODIUM CARBONATE (NF)		3.0 %
SODIUM CARBONATE (EP)		2.0 %
SODIUM CARBONATE (JP)		2.0 %
IRON (EP)		10 ppm
LEAD (FCC)		2 mg/kg

Test	Specification	
	Min	Max
MERCURY (FCC)		0.1 mg/kg
MERCURY (JP)		TO PASS TEST
HEAVY METAL (JP)		0.001 %
ARSENIC (As, FCC)		3 mg/kg
ELEMENTAL IMPURITIES		AS REPORTED
IDENTIFICATION		TO PASS TEST
EXPIRATION DATE		
DATE OF MANUFACTURE		
RESIDUAL SOLVENTS		AS REPORTED

***Spectrum Chemical Mfg Corp***

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<b>Corporate Headquarters:</b>	<b>West Coast Facility:</b>
769 Jersey Ave.	14422 S. San Pedro St.
New Brunswick, NJ 08901	Gardena, CA 90248
732.214.1300	310.516.8000

## Certificate Of Analysis

Item Number	S9405	Lot Number	4MC0028
Item	Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM)	CAS Number	1310-73-2
Molecular Formula	NaOH	Molecular Weight	40.00

TEST	SPECIFICATION		RESULT
	MIN	MAX	
Assay (Total Alkali including Max. 3.0% Na <sub>2</sub> CO <sub>3</sub> , NF)	95.0	100.5 %	100.0 %
ASSAY (JP)	95.0 %		98.9 %
Assay (Total Alkali; as NaOH, FCC)	95.0	100.5 %	99.9 %
ASSAY (EP)	97.0	100.5 %	99.2 %
Content of Sodium (NF)	54.0	59.8 %	58.9 %
CLARITY AND COLOR OF SOLUTION (JP)	Clear and colorless		CLEAR AND COLORLESS
APPEARANCE OF SOLUTION (EP)	Clear and colorless		CLEAR AND COLORLESS
Insoluble Substances and Organic Matter (FCC, NF)	TO PASS TEST		PASSES TEST
POTASSIUM (JP)	TO PASS TEST		PASSES TEST
CONTENT OF POTASSIUM (NF)		0.5 %	<0.5 %
CHLORIDE (Cl, EP)		50 ppm	<50 PPM
CHLORIDE (Cl, JP)		50 ppm	<50 PPM
SULFATE (SO <sub>4</sub> , EP)		50 ppm	<50 PPM
CARBONATE (as Na <sub>2</sub> CO <sub>3</sub> , FCC)		3.0 %	2.47 %
SODIUM CARBONATE (NF)		3.0 %	<3.0 %
SODIUM CARBONATE (EP)		2.0 %	<2.0 %
SODIUM CARBONATE (JP)		2.0 %	<2.0 %
IRON (EP)		10 ppm	<10 PPM
LEAD (FCC)		2 mg/kg	<0.05 mg/kg
MERCURY (FCC)		0.1 mg/kg	<0.05 mg/kg
MERCURY (JP)		TO PASS TEST	PASSES TEST
HEAVY METAL (JP)		0.001 %	<0.001 %

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ARSENIC (As, FCC)		3 mg/kg	<0.05 mg/kg
ELEMENTAL IMPURITIES		AS REPORTED	COMPLIES WITH STANDARD
IDENTIFICATION		TO PASS TEST	PASSES TEST
EXPIRATION DATE			31-JUL-2024
DATE OF MANUFACTURE			21-JUL-2021
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			EP 11
MONOGRAPH EDITION			FCC 13
MONOGRAPH EDITION			JP 18
MONOGRAPH EDITION			NF 2023

Certificate of Analysis Results Entered By:

TDAO  
Tiffany DAO  
22-JUN-23 11:35:57

Spectrum Chemical Mfg Corp  
777 Jersey Avenue  
New Brunswick 08901 NJ



Certificate of Analysis Results Approved By:

AWILLIAMS  
Allison Williams  
22-JUN-23 11:36:06

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

# SAFETY DATA SHEET

# spectrum®



Revision date 29-November-2022

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** SODIUM HYDROXIDE, PELLETS, NF, FCC, EP, JP, bioCERTIFIED™

### Other means of identification

**Product Code(s)** S9405

**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-%
Sodium Hydroxide	1310-73-2	100

### 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.



<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
<b>Ingestion</b>	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.
<b>Self-protection of the first aider</b>	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**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
<b>Hazardous combustion products</b>	Sodium oxides.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	none.
<b>Sensitivity to static discharge</b>	none.
<b>Special protective equipment for fire-fighters</b>	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**

<b>Personal precautions</b>	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.
<b>Other information</b>	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
Sodium Hydroxide 1310-73-2	No data available	2 mg/m <sup>3</sup> TWA	-

**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.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are 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>
pH	no data available	None known
Melting point / freezing point	323 °C / 613.4 °F	None known
Boiling point / boiling range	1388 °C / 2530.4 °F	None known
Flash point	no data available	None known
Evaporation rate	no data available	None known
Flammability (solid, gas)	no data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	no data available	None known
Relative density	2.13	None known
Water solubility	Freely soluble in water	None known
Solubility(ies)	Soluble in Alcohol	None known
Partition coefficient	No data available	None known
Autoignition temperature	no data available	None known
Decomposition temperature		None known
Kinematic viscosity	no data available	None known
Dynamic viscosity	No data available	None known
<u>Other information</u>		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	40.0	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	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. 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

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes burns.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	respiratory system, Eyes, Skin.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

## 12. Ecological information

#### Ecotoxicity

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

**Persistence and degradability** No information available.  
**Bioaccumulation** Inherently biodegradable.

**Other adverse effects** No information available.

## 13. Disposal considerations

### Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.

## 14. Transport information

### DOT

<b>UN/ID no</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard class</b>	8
<b>Special Provisions</b>	II
<b>Special Provisions</b>	IB8, IP2, IP4, T3, TP33
<b>Marine Pollutant</b>	Severe Marine Pollutant
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II
<b>Emergency Response Guide Number</b>	154

### TDG

<b>UN/ID no.</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II

### MEX

<b>UN-No</b>	UN1823
<b>Proper Shipping Name</b>	Sodium hydroxide, solid
<b>Hazard class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II

### ICAO (air)

<b>UN/ID no.</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II

### IATA

<b>UN number</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard Class</b>	8
<b>Packing group</b>	II
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II

### IMDG

<b>UN number</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard Class</b>	8
<b>Packing group</b>	II
<b>EmS-No</b>	F-A, S-B
<b>Marine Pollutant</b>	NP1
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II

### RID

<b>UN number</b>	UN1823
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<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard Class</b>	8
<b>Packing group</b>	II
<b>Classification code</b>	C6
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II
<b>Labels</b>	8

#### **ADR**

<b>UN number</b>	1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard Class</b>	8
<b>Packing group</b>	II
<b>Classification code</b>	C6
<b>Tunnel restriction code</b>	(E)
<b>Description</b>	1823, Sodium hydroxide, solid, 8, II, (E)
<b>Labels</b>	8

#### **ADN**

<b>UN/ID No</b>	UN1823
<b>Proper shipping name</b>	Sodium hydroxide, solid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Classification code</b>	C6
<b>Description</b>	UN1823, Sodium hydroxide, solid, 8, II
<b>Hazard label(s)</b>	8
<b>Limited quantity (LQ)</b>	1 kg
<b>Equipment Requirements</b>	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 1310-73-2	1000 lb final RQ 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 1310-73-2	1706	Present	Environmental hazard

**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** 29-November-2022  
**Revision Note** 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**





**Certification of Compliance with current Good Manufacturing Practices**

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

Catalog Number	Product Name
S9405	Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED™

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632  
Spectrum-New Brunswick, NJ: 2246824

Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at [qualityassurance@spectrumchemical.com](mailto:qualityassurance@spectrumchemical.com)

Sincerely,

A handwritten signature in black ink, appearing to read "Oralia Chavez", written in a cursive style.

Oralia Chavez  
Quality Assurance Specialist

## **S9405, Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED™**

### **Source Statement**

The above mentioned catalog item is manufactured by chemical synthesis. No animal or plant derived products are used in the manufacturing process.

### **BSE/TSE Statement**

The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

### **Allergen Statement**

The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Soy
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Corn
- Latex
- Sulfites > 10 ppm

### **EU Fragrance Allergen Statement**

The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

### **GMO Statement**

The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

## **Melamine Statement**

The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.

## **Nitrosamine Statement**

Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

## **Animal Testing Statement**

The above mentioned catalog item has not been tested on animals.

## **Organic Compliance Statement**

The above mentioned catalog item has not been produced using GMOs, irradiation, ethylene oxide (EtO) or sewage sludge.

## **Shelf Life Statement**

The above mentioned catalog item is typically assigned a shelf life of 36 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

## **Other Chemicals Statement**

Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- |                     |                 |
|---------------------|-----------------|
| • Aflatoxins        | • Parabens      |
| • Antibiotics       | • Pesticides    |
| • Bisphenol A (BPA) | • Phthalates    |
| • CMR Substances    | • Preservatives |



**RE: Elemental Impurities - Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM) (Cat# S9405)**

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. The following elemental impurities are likely to be present:

Elemental Impurity		Class	Expected Concentration
Lead	Pb	1	< 0.5 ppm
Arsenic	As	1	< 1 ppm
Mercury	Hg	1	< 0.1 ppm
Nickel	Ni	2A	< 5 ppm
Silver	Ag	2B	< 10 ppm

Other elemental impurities considered by USP <232>, <233> and ICH Q3D which are not addressed in the above mentioned table are not likely to be present. These substances are not used in the production process, are not intentionally added or known to be present in the above mentioned material.

This information is subject to change and is intended for risk assessment only. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at [TechServices@spectrumchemical.com](mailto:TechServices@spectrumchemical.com).

Sincerely,

Technical Services  
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

CORPORATE HEADQUARTERS

769 Jersey Avenue

New Brunswick, NJ 08901

PHONE 732.214.1300

FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street

Gardena, California 90248

PHONE 310.516.8000

FAX 310.516.9843



**RE: Residual Solvents - Sodium Hydroxide, Pellets, NF, FCC, EP, JP, bioCERTIFIED (TM) (Cat# S9405)**

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of the USP <467> Residual Solvents and the ICH Q3C Residual Solvents Guideline. No Class 1, Class 2, Class 3 or other solvents are used or produced in the manufacture of this product.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at [TechServices@spectrumchemical.com](mailto:TechServices@spectrumchemical.com).

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Gardena, California 90248  
PHONE 310.516.8000  
FAX 310.516.9843

## Label Information

The Spectrum label presents technical and safety information in an easily understood format. Our technical specialists stay abreast of the latest requirements of the Globally Harmonized System for Classification and Labelling of Chemicals (GHS), as well as the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and other government regulatory agencies in order to ensure compliance, accuracy and concise hazard communication. Below you will find a typical label example for this catalog item.

**Exp. Date: 00-00-0000**



**DANGER**  
 • Causes severe skin burns and eye damage •  
 Harmful in contact with skin • May be corrosive to metals.  
 • Wear protective gloves, protective clothing, eye protection, face protection • Do not breathe dust • Wash face, hands and any exposed skin thoroughly after handling • Keep only in original container • Absorb spillage to prevent material damage.  
**FIRST AID:** Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. If conscious, give milk or water.  
 \* Never give anything by mouth to an unconscious person.

**KEEP FROM CHILDREN**

**WARNING:**  
 Cancer and Reproductive Harm-  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**S9405                      SIZ SY**

**Sodium Hydroxide**  
 (Soda Lye; Caustic Soda)  
 Pellets, NF, FCC, EP, JP,  
 bioCERTIFIED™  
 CAS 1310-73-2

**CAUTION:** For manufacturing, processing or repacking. Further processing and testing required for use in parenteral applications.  
**Read and understand the label and Safety Data Sheet (SDS) prior to use.**

DOT: UN1823, Sodium hydroxide, solid, 8, PG II

**Chemical Emergency: (800)424-9300**

[www.SpectrumChemical.com](http://www.SpectrumChemical.com)

**NaOH                      F.W. 40.00**

Not sterile.

Assay (Total Alkali including Max. 3.0% Na <sub>2</sub> CO <sub>3</sub> NF)	95.0-100.5%
Assay (JP)	Min. 95.0%
Assay (Total Alkali; as NaOH, FCC)	95.0-100.5%
Assay (EP)	97.0-100.5%
Content of Sodium (NF)	54.0-59.8%

**MAXIMUM LIMITS**

Clarity and Color of Solution (JP)	Clear and colorless
Appearance of Solution (EP)	Clear and colorless
Insoluble Substances and Organic Matter (FCC, NF)	To pass test
Potassium (JP)	To pass test
Content of Potassium (NF)	0.5%
Chloride (Cl, EP)	50 ppm
Chloride (Cl, JP)	50 ppm
Sulfate (SO <sub>4</sub> , EP)	50 ppm
Carbonate (as Na <sub>2</sub> CO <sub>3</sub> , FCC)	3.0%
Sodium Carbonate (NF)	3.0%
Sodium Carbonate (EP)	2.0%
Sodium Carbonate (JP)	2.0%
Iron (EP)	10 ppm
Lead (FCC)	2 mg/kg
Mercury (FCC)	0.1 mg/kg
Mercury (JP)	To pass test
Heavy Metals (JP)	0.001%
Arsenic (As, FCC)	3 mg/kg
Elemental Impurities	As reported
Bacterial Endotoxins	2.5 EU/mg
Residual Solvents	To pass test
Microbial Content:	
TAMC	1000 CFU/g
TYMC	100 CFU/g

DELiquescent: Keep tightly closed.  
 W 1/L10GHS                      ?                      Lot No. XQ####

### Spectrum Chemical Mfg Corp

#### Corporate Headquarters:

769 Jersey Ave.  
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 732.214.1300

#### West Coast Facility:

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