



SAFETY DATA SHEET

1. Identification

| | |
|---------------------|--|
| Product Name | Sodium hydroxide |
| Cat No. : | S318-1; S318-3; S318-3LC; S318-5; S318-10; S318-10LC; S318-50; S318-50LC; S318-100; S318-500; |
| Synonyms | Caustic soda; Lye |



Ingestion

Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms/effects

Causes burns by all exposure routes. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician

Treat symptomatically

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|------------------|------------------------------|------------------------------|--------------------------|
| Sodium hydroxide | Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ | CEV: 2 mg/m ³ |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|---|------------------------------|
| Physical State | Solid |
| Appearance | White |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | 14 (5 %) |
| Melting Point/Range | 318 °C / 604.4 °F |
| Boiling Point/Range | 1390 °C / 2534 °F @ 760 mmHg |
| Flash Point | Not applicable |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | 1 mmHg @ 739 °C |
| Vapor Density | No information available |
| Relative Density | 2.13 |
| Solubility | Soluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| Molecular Formula | NaOH |
| Molecular Weight | 40 |

10. Stability and reactivity

| | |
|-------------------------------|---|
| Reactive Hazard | None known, based on information available |
| Stability | Water reactive. Hygroscopic. |
| Conditions to Avoid | Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water. |
| Incompatible Materials | Water, Metals, Acids |

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), Sodium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Component Information

Component
Sodium hydroxide

LD50 Oral

LD50 Dermal

LC50 Inhalation

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

| | |
|----------------------|-------------------------|
| UN-No | UN1823 |
| Proper Shipping Name | Sodium hydroxide, solid |
| Hazard Class | 8 |
| Packing Group | II |

TDG

| | |
|----------------------|-------------------------|
| UN-No | UN1823 |
| Proper Shipping Name | SODIUM HYDROXIDE, SOLID |
| Hazard Class | 8 |
| Packing Group | II |

IATA

| | |
|----------------------|-------------------------|
| UN-No | UN1823 |
| Proper Shipping Name | SODIUM HYDROXIDE, SOLID |
| Hazard Class | 8 |
| Packing Group | II |

IMDG/IMO

| | |
|----------------------|-------------------------|
| UN-No | UN1823 |
| Proper Shipping Name | SODIUM HYDROXIDE, SOLID |
| Hazard Class | 8 |
| Packing Group | II |

15. Regulatory information

International Inventories

Sudden Release of Pressure Hazard
Reactive Hazard

No
No

Clean Water Act
Component

CWA - Hazardous
Substances

CWA - Reportable
Quantities

CWA - Toxic Pollutants

CWA - Priority Pollutants

Sodium hydroxide

Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS