

## **Safety Data Sheet**

# Sodium Hydroxide 10% (w/w)

### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Sodium Hydroxide 10% (w/w)

Synonyms/Generic Names: Caustic Soda Solution

Product Number: 5068

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30) www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

#### Hazard Not Otherwise Classified (HNOC): None

#### Signal Words: Danger

**Pictograms:** 



#### **GHS Classification:**

Skin corrosion	Category 1
Serious eye damage	Category 1
Acute aquatic toxicity	Category 3

#### GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.

#### **Precautionary Statements:**

P260	Do not breathe dusts or mists.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face 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.	
	IF INHALED: Remove person to fresh air and keep comfortable for	
P304+P340	breathing.	
P305+P351+P338		
	contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER/doctor/physician.	
P363	Wash contaminated clothing before reuse.	
P405	Store locked up.	
P501	Dispose of contents/container in accordance with local regulations.	

### Potential Health Effects

Eyes	Causes severe eye burns.	
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous	
	membranes and upper respiratory tract.	
Skin	May be harmful if absorbed through skin. Causes skin burns.	
Ingestion	May be harmful if swallowed.	

### **NFPA Ratings**

Health	3
Flammability	0
Reactivity	1
Specific hazard	Not Available

### **HMIS Ratings**

<b>U</b>	
Health	3
Fire	0
Reactivity	1

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Sodium Hydroxide	9-11	1310-73-2	215-185-5	NaOH	40.00 g/mol
Water	Balance	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

### **4. FIRST-AID MEASURES**

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated
	clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
	conscious, wash out mouth with water. Get medical attention.

### **5. FIRE-FIGHTING MEASURES**

Suitable (and unsuitable)	Product is not flammable. Use appropriate media for adjacent fire.		
extinguishing media	Cool containers with water.		
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective		
and precautions for	clothing, including eye protection and boots.		
firefighters			
Specific hazards arising from	Emits toxic fumes (sodium oxides) under fire conditions. (See also		
the chemical	Stability and Reactivity section).		

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for	Neutralize spill. Absorb spill with noncombustible absorbent material,
containment and cleaning up	then place in a suitable container for disposal. Clean surfaces
	thoroughly with water to remove residual contamination. Dispose of all
	waste and cleanup materials in accordance with regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Sodium Hydroxide	2 mg/m <sup>3</sup>	CEIL	ACGIH
	2 mg/m <sup>3</sup>	PEL	OSHA
	2 mg/m <sup>3</sup>	CEIL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels CEIL: Ceiling

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#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles, and face shield.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
Other	Not Available	

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Colorless liquid.
Odor	Odorless.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Specific gravity	1.05-1.07
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Available

### **10. STABILITY AND REACTIVITY**

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Acids, organic materials, chlorinated solvents, aluminum,
	phosphorus, zinc, tin.
Hazardous Decomposition Products	Sodium oxides.

### **11. TOXICOLOGICAL INFORMATION**

### Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

### Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is	
	identified as probable, possible or confirmed human carcinogen by IARC.	
ACGIH	No components of this product present at levels greater than or equal to 0.1% is	
	identified as a carcinogen or potential carcinogen by ACGIH.	
NTP	No components of this product present at levels greater than or equal to 0.1% is	
	identified as a known or anticipated carcinogen by NTP.	
OSHA	No components of this product present at levels greater than or equal to 0.1% is	
	identified as a carcinogen or potential carcinogen by OSHA.	

### Signs & Symptoms of Exposure

Skin	Extent of damage depends on duration of contact. Burning, itching, redness, inflammation or swelling of exposed tissues.		
Eyes	Eye burns, watering eyes.		
Respiratory	Burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache,		
	nausea.		

**Ingestion** Burning, choking, nausea, vomiting, severe pain.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Target Organ(s)	Kidney, Liver, Eyes, Skin, Mucous membranes, Respiratory system,
	Cardiovascular system
Reproductive Toxicity	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

### **12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

Aquatic Vertebrate	Not Available	
Aquatic Invertebrate	Not Available	
Terrestrial	Not Available	
Persistence and Degra	adability	Not Available
Bioaccumulative Poter	ntial	Not Available
Mobility in Soil		Not Available
PBT and vPvB Assessment		Not Available
Other Adverse Effects		Not Available

### **13. DISPOSAL CONSIDERATIONS**

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.	
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.	

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

### **14. TRANSPORTATION INFORMATION**

US DOT	UN1824, Sodium hydroxide solution, 8, pg II
TDG	UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II
IMDG	UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II
Marine Pollutant	No
IATA/ICAO	UN1824, Sodium hydroxide solution, 8, pg II

### **15. REGULATORY INFORMATION**

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Listed: Sodium Hydroxide

Massachusetts: Toxic or Hazardous Substance List,	Not Listed
Right to Know	
Pennsylvania: Hazardous Substance List	Listed: Sodium Hydroxide
New Jersey: Right to Know Hazardous Substance	Listed: Sodium Hydroxide
List	
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard.
SARA 312	Acute Health Hazard.
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material.

### **16. OTHER INFORMATION**

Revision	Date
Original	01/22/2014
Revision 1	03/21/2016
Revision 2	04/04/2022

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