

## 1. Product and Company Identification

**Product Code:** 0003436  
**Product Name:** Sodium Hydroxide Solution 4%  
**Company Name:** Alpha-Tec Systems, Inc. **Phone Number:** 1 (360)260-2779  
 1311 SE Cardinal Ct Suite 170  
 Vancouver, WA 98683  
**Web site address:** Alphatecsystems.com  
**Email address:** Regulatory@Alphatecsystems.com  
**Emergency Contact:** INFOTRAC  
 International 00-1- (352)323-3500  
 North America 1 (800)535-5053  
**Information:**  
**Intended Use:** For Laboratory Use  
**Product List** Sodium Hydroxide 4% Also applies to Product Code: 0003471.

## 2. Hazards Identification

### Skin Corrosion/Irritation, Category 2



**GHS Signal Word:** **Warning**  
**GHS Hazard Phrases:** H315 - Causes skin irritation.  
**GHS Precaution Phrases:** P264 - Wash hands thoroughly after handling.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P362+364 - Take off contaminated clothing and wash it before reuse.  
**GHS Response Phrases:** P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
 P321 - Specific treatment see ... on this label.  
 P332+313 - If skin irritation occurs, get medical advice/attention.  
**GHS Storage and Disposal Phrases:** No phrases apply.  
**Inhalation:** The toxicological properties of this substance have not been fully investigated. Inhalation of dust may cause respiratory tract irritation.  
**Skin Contact:** May cause skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.  
**Eye Contact:** May cause eye irritation.  
**Ingestion:** The toxicological properties of this substance have not been fully investigated.

## 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	3.6 -4.0 %	WB4900000

### 4. First Aid Measures

**Emergency and First Aid**
**Procedures:**

- In Case of Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- In Case of Skin Contact:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
- In Case of Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
- Note to Physician:** Treat symptomatically and supportively.

### 5. Fire Fighting Measures

- Flash Pt:** No data. Method Used: Estimate
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- Suitable Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.
- Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- Flammable Properties and Hazards:** No data available.
- Hazardous Combustion Products:** No data available.

### 6. Accidental Release Measures

- Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

### 7. Handling and Storage

- Precautions To Be Taken in Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
- Precautions To Be Taken in Storing:** Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

### 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	PEL: 2 mg/m <sup>3</sup>	CEIL: 2 mg/m <sup>3</sup>	No data.

<b>Respiratory Equipment (Specify Type):</b>	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.
<b>Eye Protection:</b>	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.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Engineering Controls (Ventilation etc.):</b>	Use adequate ventilation to keep airborne concentrations low.

### 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas    [ X ] Liquid    [ ] Solid	
<b>Appearance and Odor:</b>	Colorless/Clear. Odorless.	
<b>pH:</b>	No data.	
<b>Melting Point:</b>	No data.	
<b>Boiling Point:</b>	No data.	
<b>Flash Pt:</b>	No data.    Method Used: Estimate	
<b>Evaporation Rate:</b>	No data.	
<b>Flammability (solid, gas):</b>	No data available.	
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.	
<b>Vapor Density (vs. Air = 1):</b>	No data.	
<b>Specific Gravity (Water = 1):</b>	No data.	
<b>Solubility in Water:</b>	No data.	
<b>Octanol/Water Partition Coefficient:</b>	No data.	
<b>Autoignition Pt:</b>	No data.	
<b>Decomposition Temperature:</b>	No data.	
<b>Viscosity:</b>	No data.	

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ]    Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	Incompatible materials, dust generation, Strong oxidants.
<b>Incompatibility - Materials To Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition or Byproducts:</b>	Nitrogen oxides, Carbon monoxide.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ]    Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

## 11. Toxicological Information

**Toxicological Information:** Epidemiology: No data available.  
Teratogenicity: No data available.  
Reproductive Effects: Experimental reproductive effects have been observed.  
Mutagenicity: Mutation data reported.  
Neurotoxicity: Other Studies:

**Carcinogenicity/Other Information:** CAS# 3118-97-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

## 12. Ecological Information

No data available.

## 13. Disposal Considerations

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

## 14. Transport Information

**GHS Classification:** Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Sodium hydroxide solution, mixture.  
**DOT Hazard Class:** 8 CORROSIVE  
**UN/NA Number:** UN1824 **Packing Group:** II



**LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** No information available.  
**UN Number:** 1824 **Packing Group:** II  
**Hazard Class:** 8 - CORROSIVE **TDG Classification:**

**AIR TRANSPORT (ICAO/IATA):**

**ICAO/IATA Shipping Name:** Sodium hydroxide solution, mixture.

## 15. Regulatory Information

**This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:**

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Acute (immediate) Health Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Chronic (delayed) Health Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Fire Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Sudden Release of Pressure Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Reactive Hazard

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - E

## 16. Other Information

**Revision Date:** 12/27/2016

**Preparer Name:** Tim Meehan

**Additional Information About This Product:** No data available.

**Document & Change Control Number** SDS0087.C CC16-312.

**Company Policy or Disclaimer:** 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.