



## SODIUM HYDROXIDE

### 1. CHEMICAL IDENTITY

Chemical Name	SODIUM HYDROXIDE	Chemical Classification	Alkaline Inorganic Compound
Synonyms	Caustic soda lye	Trade Name	----

Formula	NaOH	C.A.S. NO.	1310-73-2	U.N. NO.	1824
Regulated Identification Name	Shipping Code/Label	Sodium Hydroxide		Hazchem No.	2 R
		corrosive, Class - 8			
	Hazardous Waste I.D. NO		16		

Hazardous Ingredients	C.A.S. No.	Hazardous Ingredients	C.A.S. No.
1. Sodium Hydroxide	1310-73-2	3.	
2.		4.	

### 2. PHYSICAL AND CHEMICAL DATA

Boiling Range/Point °C	142-148°C	Physical State	Liquid	Appearance	Clear soapy Liquid
Melting/Freezing Point °C	Odourless	Crystallization begin at 12-15°C	Vapour Pressure at 40°C	3.6 mm Hg	Odour
Vapour Density (Air = 1)	Not pertinent	Solubility in water at 20 °C	52%	Others	----
Specific Gravity Water = 1	1.53 at 15°C	pH	Highly alkaline		



### 3. FIRE AND EXPLOSION HAZARD DATA

Flammability	No	LEL	Not Pertinent ( % by vol . )	Flash Point	Not Pertinent °C	Autoignition Temp. °C	Not Pertinent
TDG Flammability	Non Flammable	UEL	Not Pertinent ( % by vol . )	Flash Point	Not Pertinent °C		

Explosion Sensitivity to Impact	Stable	Explosion Sensitivity to Static Electricity	Stable	Hazardous Combustion Products	Emits toxic fumes of Na <sub>2</sub> O
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Hazardous Polymerisation	Will not occur				
Combustible Liquid	No	Explosive Material	No	Corrosive Material	Yes
Flammable Material	No	Oxidiser	No	Others	---
Pyrophoric Material	No	Organic	No	Peroxide	No

### 4. REACTIVITY DATA :

Chemical Stability	Stable
Incompatibility with other Material	Yes, Brass, Bronze, Al, Trichloro ethylene. (TEC)
Reactivity	Reacts with metals like Al, Tin, Zinc to generate flammable & explosive gas. On contact with TCE, produce Dichloro ethylene.
Hazardous Reaction Products	Flammable gas Hydrogen



5. HEALTH HAZARDS DATA :

Routes of Entry	Skin contact, Eye contact, Ingestion, Inhalation.
Effects destruction Exposure/ Symptoms	Causes sever burns corrosive action and of tissues causes stinging sensation to nose.
Emergency Treatmens	Remove the contaminated clothes, flush with safety shower for about 15 minutes. On swallowing drink large quantities of water & report to first aid centre.

TLV (ACGIH)	--- 2 (ceiling) ppm mg/M <sup>3</sup>	STEL	Not listed	ppm	mg/M <sup>3</sup>
Permissible Exposure Limit LD-50	--- 2 (ceiling) ppm mg/M <sup>3</sup>	Odour Threshold	Odourless ppm	Odourless mg/M <sup>3</sup>	

NFPA Hazard	Health	Flammability	Reactivity
SPECIAL Signale	3	0	1

6. PREVENTIVE MEASURES :

Personal protective Equipment	Rubber/PVC. Postmorterm gloves, Dust mask, goggles, Face shield, Gum boots, PVC appron/suit /Neck to toe overall.
Handling and Storage Precautions	All necessary safety equipments must be made to avoid physical contact of the material provide safety shower, eye washer when 50 % NaOH handed,. It can be stored at ambient temperature. Keep away from concentrated acids.



7. EMERGENCY AND FIRST AID MEASURE :

FIRE	FIRE EXTINGUISHING	Not Flammable
FIRE	Special Procedures When transported by road, tankers must be leak proof & check to any leakage, Avoid Spillage.	
EXPOSURE	Unusual Hazards	Toxic gases are produced.
	First Aid Measures	Same as emergency Treatment.
SPILLS	Antidotes/Dosages	Not Available
	Steps to be taken	Well ventilated close system recommended. Flush contaminated area with water dilute with acid & discharge to sewer with sufficient water.
	Waste Disposal Method	--Do--

8. ADDITIONAL INFORMATION/REFERENCES :

1,2,4,5 - Tetrachlor benzene has caused many industrial explosions and forms extremely toxic 2,3,7,8 - tetrachloride benzo dioxin under proper temperature pressure & stable of division. It can react or ignite violently with Acetic Acid, Acetaldehyde, Acetic Anhydride, Anhydride, Acrolein, Acrylonitrile, Allyl Alcohol, Allyl chloride.

9. MANUFACTURES/SUPPLIERS DATA :

Name of Firm GUJARAT ALKALIES AND CHEMICALS LIMITED	Contact Person in Emergency SHIFT INCHARGE
Mailing Address P.O. Petrochemicals Ltd. 391346 Dist :- Vadodara	Local Bodies Involved -----
Telephone/Telex Nos. 2232681-82, 2232981- 82, 2232039,2230384	Standard Packing Tanker load
Telephonic Address	Tremcard Derail / Ref. Provided Others -----

10. DISCLAIMER :

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