

OFI TESTING EQUIPMENT, INC.  
**MATERIAL SAFETY DATA SHEET**

<b>SECTION I - PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>Chemical Name:</b>	SODIUM HYDROXIDE
<b>Trade Name:</b>	SODIUM HYDROXIDE PELLETS
<b>OFI Part No.</b>	260-02
<b>Chemical Family:</b>	Caustic soda; lye; sodium hydroxide solid; sodium hydrate
<b>Formula:</b>	NaOH
<b>Manufacturer:</b>	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 USA Phone: (713) 880-9885
<b>In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:</b>	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500
<b>SECTION II - HAZARD IDENTIFICATION</b>	
<b>CAS #:</b>	<b>CHEMICAL NAME</b>
1310-73-2	Sodium Hydroxide 99-100%
<b>SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS</b>	
<b>Emergency Overview:</b>	Poison! Danger! Corrosive. May be fatal if swallowed. Harmful if inhaled. Causes burns to any area of contact. Reacts with water, acids and other materials.
<b>Inhalation:</b>	Severe Irritant. Effects from Inhalation of Mist vary from Mild Irritation to Serious Damage of the Upper Respiratory Tract, Depending on Severity of Exposure. Symptoms may Include Sneezing, Sore Throat or Runny Nose. Severe Pneumonitis may Occur
<b>Ingestion:</b>	Corrosive! Swallowing may Include Severe Burns of Mouth, Throat, and Stomach. Severe Scarring of Tissue and Death may Result. Symptoms may Include Bleeding, Vomiting, Diarrhea, Fall in Blood Pressure. Damage may Appear Days after Exposure.
<b>Skin:</b>	Corrosive! Contact with Skin can Cause Irritation or Severe Burns and Scarring with Greater Exposures.
<b>Eye Contact:</b>	Corrosive! Causes Irritation of Eyes, and with Greater Exposures it can Cause Burns that May Result in Permanent Impairment of Vision, Even Blindness.
<b>Chronic Exposure:</b>	Prolonged Contact with Dilute Solutions or Dust has a Destructive Effect upon Tissue.
<b>SECTION IV - FIRST AID MEASURES</b>	
<b>Inhalation:</b>	Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
<b>Ingestion:</b>	Do Not Induce Vomiting! Give Large Quantities of Water or Milk if Available. Never Give Anything by Mouth to an Unconscious Person. Get Medical Attention Immediately.
<b>Skin:</b>	Immediately Flush Skin with Plenty of Water for at Least 15 Minutes while Removing Contaminated Clothing and Shoes. Call Physician Immediately. Wash Clothing before Reuse.
<b>Eyes:</b>	Immediately Flush Eyes with Gentle but Large Stream of Water for at Least 15 Minutes, Lifting Lower and Upper Eyelids Occasionally. Get Medical Attention Immediately.
<b>Note to Physician:</b>	Perform Endoscopy in All Cases of Suspected Sodium Hydroxide Ingestion.
<b>SECTION V - FIRE FIGHTING MEASURES</b>	
<b>Fire:</b>	Not Considered to be a Fire Hazard. Hot or Molten Material can React Violently with Water. Can React with Certain Metal, such as Aluminum, to Generate Flammable Hydrogen Gas.
<b>Explosion:</b>	Not Considered to be an Explosion Hazard.
<b>Fire Extinguishing Media:</b>	Use any means Suitable for Extinguishing Surrounding Fire. Adding Water to Caustic Solution Generates Large Amounts of Heat.
<b>Special Information:</b>	In the Event of Fire, Wear Full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Positive Pressure Mode.

<b>SECTION VI - ACCIDENTAL RELEASE MEASURES</b>	
<b>Accidental Release:</b>	Ventilate area of Leak or Spill. Keep Unnecessary and Unprotected People away from the area of Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Contain and Recover Liquid when Possible. Do not Flush Caustic Residues to the Sewer. Residues from Spills can be Diluted with Water, Neutralized with Dilute Acid such as Acetic, Hydrochloric or Sulfuric.
<b>SECTION VII - HANDLING AND STORAGE</b>	
	Keep in a Tightly closed Container. Protect from Physical Damage. Store in a Cool, Dry, Ventilated Area away from Sources of Heat, Moisture and Incompatibilities. Store above 60 °F (16 °C) to Prevent Freezing. Always add Caustic to Water while Stirring, Never the Reverse. Containers of this Material may be Hazardous when Empty since they Retain Product Residues (Vapors, Liquid). Do Not Store with Aluminum or Magnesium.
<b>SECTION VIII – EXPOSURE CONTROL/ PERSONAL PROTECTION</b>	
<b>Ventilation System:</b>	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures Below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred Because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
<b>Airborne Exposure Limits:</b>	OSHA Permissible Exposure (PEL) 2 mg/m3 (Ceiling)-ACGIH (TLV) 2 mg/m3 (Ceiling)
<b>Personal Respirators: (NIOSH APPROVED)</b>	If the Exposure Limit is Exceeded, a Half-Face Dust/Mist Respirator May be Worn for up to Ten Times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. A Full-Face piece Dust/Mist Respirator May be Worn up to 50 times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest.
<b>Skin Protection:</b>	Wear Impervious Protective Clothing, Including Boots, Apron, Gloves, Lab Coat or Coveralls, as Appropriate, to Prevent Skin Contact.
<b>Eye Protection:</b>	Use Chemical Safety Goggles and/or Full Face Shield where Splashing is Possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.
<b>SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance / Odor:</b>	White, Deliquescent Pellets or Flakes / Odorless
<b>Solubility:</b>	111g / 100g of Water
<b>Specific Gravity:</b>	2.13
<b>pH:</b>	13 - 14 (0.5% soln.)
<b>% Volatiles by Vol.:</b>	0
<b>Melting Point:</b>	604°F (318°C)
<b>Boiling Point:</b>	2534° F (1390°C)
<b>Vapor Density (Air=1):</b>	> 1.0
<b>Vapor Pressure (mmHg):</b>	Negligible.
<b>SECTION X -STABILITY AND REACTIVITY</b>	
<b>Stability:</b>	Stable under ordinary conditions of use and storage. Very hygroscopic. Can slowly pick up moisture from air and react with carbon dioxide from air to form sodium carbonate. Sodium oxide.
<b>Hazardous Decomposition:</b>	Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibilities:</b>	Sodium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may causes violent reactions. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. Contact with metals such as aluminum, magnesium, tin, and zinc cause formation of flammable hydrogen gas. Sodium hydroxide, even in fairly dilute solution, reacts readily with various sugars to produce carbon monoxide. Precautions should be taken including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.
<b>Conditions to Avoid:</b>	Moisture, dusting and incompatibles.
<b>SECTION XI - TOXICOLOGICAL INFORMATION</b>	
<b>Carcinogenic References:</b>	NTP Carcinogen - Known: No, IARC Category- None
<b>SECTION XII - ECOLOGICAL INFORMATION</b>	
<b>Environmental Fate:</b>	No Information Found
<b>Environmental Toxicity:</b>	No Information Found

<b>SECTION XIII -DISPOSAL CONSIDERATIONS</b>																
Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.																
<b>SECTION XIV -TRANSPORT INFORMATION</b>																
<b>Shipping Name:</b>	SODIUM HYDROXIDE															
<b>Hazard Class:</b>	8															
<b>Identification No.:</b>	UN1823 , Packing Group II															
<b>SECTION XV - REGULATORY INFORMATION</b>																
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<b>Chemical Weapons Convention:</b>	No															
<b>TSCA 12 (b):</b>	No															
<b>CDTA:</b>	No															
<b>SARA 311/312:</b>	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Pure/Solid)															
<b>Australian Hazchem Code:</b>	2R															
<b>Poison Schedule:</b>	S6															
<b>SECTION XVI - OTHER INFORMATION</b>																
<b>NFPA Rating:</b>	HEALTH-3, FLAMMABILITY-0, REACTIVITY-1															
<b>Disclaimer:</b>	The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).															