SAFETY DATA SHEET
SODIUM HYDROXIDE

SECTION 1 · COMPANY AND PRODUCT IDENTIFICATION

PRODUCT
Product Name: Sodium Hydroxide 25%-50%
Product Description: Strong Alkali

COMPANY IDENTIFICATION
Supplier: Polytec, Inc.
191 Barley Park Lane
Mooresville, NC 28115

24 Hour Emergency Telephone: (800)-424-9300 CHEMTREC
General Information: (704) 660-5195

SECTION 2 · HAZARDS IDENTIFICATION

GHS Classification:
[ Health ]
Skin corrosion Category 1A
Serious eye damage Category 1
Eye irritation Category 1

[ Environmental ]
Acute Aquatic Toxicity Category 3

[ Physical ]

GHS Label elements, including precautionary statements

Pictograms

Signal Word: Danger
Symbols: Corrosive

Health Statements:
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Physical Phrases:
H290 May be corrosive to metals

Storage Phrases:
P403+223: Store in a well ventilated place. Store in a tightly closed container.

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME   CAS Number   %WT
Caustic Soda     1310-73-2   25-50
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SECTION 4 - FIRST AID MEASURES

FIRST AID PROCEDURES:
Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact: Remove contaminated clothing. Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing. Get medical attention if symptoms appear.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing media: Not considered a fire hazard. Use any means suitable for extinguishing surrounding fire.
Hazardous combustion products: Oxides of carbon and various hydrocarbons
Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Unusual Fire and Explosion Hazards: Containers can build up pressure if exposed to heat and/or fire. Use water spray to keep fire-exposed containers cool. Not considered an explosion hazard.

SECTION 6 - ACCIDENTAL RELEASE and DISPOSAL MEASURES

Spills: Evacuate all non-essential personnel from the spill area. Material is corrosive. Suitable protective clothing should be worn. Shut off or plug source of spill. Small spills: absorb on inert media and collect into suitable container.
Large Spills: Dike spill area to contain liquid. Salvage as much re-useable liquid as possible into a suitable container.
Avoid contaminating ground and surface water.

SECTION 7 - STORAGE AND HANDLING

Handling: Do not get in eyes, on skin or on clothing. Keep container closed and tightly sealed when not in use. Use good hygiene practices.
Storage: Store in a cool, dry well ventilated area. Prevent physical damage. Prevent contact of liquid with human tissue. Do not eat or drink while handling this material. Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Exposure Limits: Caustic Soda 10 ppm ACGIH; 15 ppm OSHA

Personal Protective Equipment (PPE):
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.
Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.
Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.
Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.
Other Equipment: Eye wash station and shower in close proximity to use are advised.
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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<th>Property</th>
<th>25%</th>
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SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: Keep away from heat, flame and other potential ignition sources.
Materials to Avoid: Strong acids, and oxidizers.
Decomposition Products: When combusted, oxides of carbon and various hydrocarbons.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:
Skin: Contact cause severe skin burns. Severity depends on the amount and duration of exposure.
Eyes: Liquid contact will cause severe eye burns. Causes serious eye damage.
Inhalation: Excessive inhalation of high concentrations may be harmful. Mist or vapor can irritate the throat and lungs.
Ingestion: If swallowed this material causes digestive tract burns. Harmful if swallowed. Aspiration of this material into the lungs may result in damage or death.

Acute oral toxicity:
Caustic Soda : LD50 rat: 300-500 mg/kg

Acute inhalation toxicity:
Caustic Soda : LD50 rat: No available data

Acute dermal toxicity:
Caustic Soda: LD50 rabbit: 2 g/kg

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: This product is unlikely to pose a significant hazard to aquatic life.
Bio-accumulative potential: Bioaccumulation of this product is not expected to be significant. This product is readily biodegradable.
Mobility: Accidental spillage may lead to penetration in the soil and contamination of groundwater.

SECTION 13 - DISPOSAL CONSIDERATIONS

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 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
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SECTION 14 · TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Sodium Hydroxide Solution
Hazard Class: 8
UN Number: 1824
Packaging Group: 2

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)
The reportable quantity (RQ) for this material is 1000 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S.Federal Law. Also contact appropriate state and local regulatory agencies.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:
Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard,

SARA Section 313 (40 CFR 372) Hazard Categories: This product contains the following toxic chemical subject to reporting requirements, None,

Clean Water Act: This product contains no chemicals which are listed under the CWA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 · OTHER INFORMATION

MSDS Revision Date: 5/15/15

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3
Flammability: 0
Reactivity: 1

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