# Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

## Section 1: Identification

**Product Name** Sodium Hydroxide NF
**Commercial Name** Not available.
**Product Use** Not available.
**Restrictions On Use** Not available.

**Product Code** 50-1237

**Company**
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
**CHEMTREC (24hr) 1-800-424-9300**

## Section 2: Hazard(s) Identification

**OSHA Haz Com: CFR 1910.1200** Corrosive to metals: Category 1 Skin Corrosion/Irritation: Category 1A Serious Eye Damage/Eye Irritation: Category 1 Specific target organ toxicity (single exposure) Category 3 Target Organs - Respiratory system

**Signal Word** DANGER

**Hazard Statement(s)** May be corrosive to metals. Causes severe skin burns and eye damage.

**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**

**Prevention** Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Use only outdoors or in a well-ventilated area Keep only in original container

**Response** Immediately call a POISON CENTER or doctor/physician Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Skin IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Ingestion IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Spills Absorb spillage to prevent material damage

**Storage** Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosive resistant polypropylene container with a resistant inliner Store in a dry place

**Disposal** Dispose of contents/container to an approved waste disposal plant

## Section 3: Composition/Information on Ingredients

**Substance/Mixture** Substance
**Components** Sodium Hydroxide NF
**% By Weight** 100
**CAS#** 1310-73-2
**Molecular Weight** 40 g/mole
**Chemical Formula** NaOH
**Synonym(s)** Caustic soda; lye; sodium hyroxide solid; sodium hydrate

**Mixtures**

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|---|---|---|---|---|
| Sodium Hydroxide NF | 1310-73-2 | 100 | STEL: 2 (mg/m3) from ACGIH (TLV) [United States]<br>TWA: 2 CEIL: 2 (mg/m3) from OSHA (PEL) [United States]<br>CEIL: 2 (mg/m3) from NIOSH | Not available |

## Section 4: First-Aid Measures

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing

**Ingestion** Do NOT induce vomiting. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Drink plenty of water

**Symptoms/Effects**

**Acute** Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Delayed** Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Immediate Medical Attention**
Treat symptomatically

## Section 5: Fire-Fighting Measures

**Suitable Extinguishing Media**
CO 2, dry chemical, dry sand, alcohol-resistant foam

**Unsuitable Extinguishing Media**
Do not use a solid water stream as it may scatter and spread fire

**Products of Combustion**
Hydrogen. Sodium oxides

**Firefighters Special Equipment and Precautions**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors

## Section 6: Accidental Release Measures

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Environmental Precautions: Do not allow material to contaminate ground water system. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Methods for Containment and Clean Up: Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

## Section 7: Handling and Storage

Handling: Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Incompatible Materials. Strong oxidizing agents. Acids. Metals. Water.

## Section 8: Exposure Controls/Personal Protection

**Exposure Limits** ACGIH TLV: Ceiling: 2 mg/m3 OSHA PEL: Ceiling: 2 mg/m3, TWA: 2 mg/m3 NIOSH IDLH: IDLH: 10 mg/m3, Ceiling: 2 mg/m3 Mexico OEL (TWA): Ceiling: 2 mg/m3

**Engineering Controls** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location

| | |
|---|---|
| **Personal Protection** | Eye/face Protection: 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. Tight sealing safety goggles. Face protection shield. Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection: 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. Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. |

## Section 9: Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | White solid. Pellets. Flakes. |
| **Odor** | Odorless. |
| **Odor Threshold** | Not available. |

| | | | |
|---|---|---|---|
| **Melting Point** | 318 °C / 604.4 °F | **pH** | 14 (5 %) |
| **Freezing Point** | Not available. | **Vapor Pressure** | 1 mbar @ 700 °C |
| **Boiling Point/Range** | 1390 °C / 2534 °F @ 760 | **Vapor Density** | Not available |
| **Decomposition temperature** | Not available. | **Viscosity** | Not available. |
| **Partition Coefficient: n-octanol/water** | Not available. | **Evaporation Rate** | Not available. |
| **Flash Point** | Not applicable. | **Autoignition temperature** | Not available. |
| **Flammability** | Not available. | **Flammability or Explosive Limits:** | |
| | | **Lower** | Not available. |
| | | **Upper** | Not available. |

| | |
|---|---|
| **Solubility(ies)** | Soluble in water |
| **Other** | Bulk Density 2.13 g/cm3 |

## Section 10: Stability and Reactivity

| | |
|---|---|
| **Reactivity** | Yes |
| **Chemical Stability** | Stable under normal conditions |
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Conditions to Avoid** | Incompatible products. Excess heat |
| **Incompatible Materials** | Strong oxidizing agents, Acids, Metals, Water |
| **Hazardous Decomposition Products** | Hydrogen, Sodium oxides |

## Section 11: Toxicological Information

**RTECS** WB4900000

**Acute Toxicity**
LD50 Oral : 140 - 340 mg/kg ( Rat ) LD50 Dermal: 1350 mg/kg ( Rabbit ) LC50 Inhalation: Not listed

**Skin Corrosion/Irritation**
Causes severe burns by all exposure routes

**Serious Eye Damage/Irritation**
Not available

**Respiratory or Skin Sensitization**
Not available

**Germ Cell Mutagenicity**
Not available

**Carcinogenicity**
Not available

**Reproductive Toxicity**
Not available

**Routes of Entry**
Skin. Oral, Dermal.

**Symptoms Related to Exposure**
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Potential Health Effects**
Not available

**Target Organ(s)** Not available

## Section 12: Ecological Information

**Ecotoxicity**
Do not empty into drains. Large amounts will affect pH and harm aquatic organisms

**Persistance and Degradability**
Soluble in water Persistence is unlikely based on information available

**Bioaccumulative Potential**
Not available

**Mobility in Soil**
Will likely be mobile in the environment due to its water solubility

**Other Adverse Effects**
Not available

## Section 13: Disposal Considerations

**Waste Disposal**
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**Disposal of Container**
Not available

**Other Considerations**
Not available

## Section 14: Transport Information

**DOT Classification**
UN-No UN1823 Proper Shipping Name SODIUM HYDROXIDE, SOLID Hazard Class 8 Packing Group II

## Section 15: Regulatory Information

**Regulations**
SARA 313 Not applicable SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Component CWA - Hazardous Substances CWA - Reportable Quantities CWA - Toxic Pollutants CWA - Priority Pollutants Sodium hydroxide X 1000 lb - - Clean Air Act Not applicable OSHA - Occupational Safety and Health Administration Not applicable CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) Component Hazardous Substances RQs CERCLA EHS RQs Sodium hydroxide 1000 lb - California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island Sodium hydroxide X X X - X U.S. Department of Transportation Reportable Quantity (RQ): Y DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals.

**Other**
Saf-T-Data: Health: 2 - Moderate (Poison) Flammability: 0 - None Reactivity: 2 - Moderate Contact: 4 - Extreme (Corrosive) NFPA Ratings: Health: 3 Flammability: 0 Instability: 1

## Section 16: Other Information

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1 Label Hazard Warning: POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF CAUSES BURNS TO ANY AREA OF CONTACT. REACTS WITH WATER, ACIDS AN MATERIALS. Label Precautions: Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Label First Aid: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of w an unconscious person. In case of contact, immediately flush eye minutes while removing contaminated clothing and shoes. Wash clo fresh air. If not breathing give artificial respiration. If brea attention immediately. Product Use: Laboratory Reagent. Revision Information: No Changes. Disclaimer: ********** Mallinckrodt Baker, Inc. provides the information contained here representation as to its comprehensiveness or accuracy. This doc appropriate precautionary handling of the material by a properly Individuals receiving the information must exercise their indepe appropriateness for a particular purpose.MALLINCKRODT BAKER, IN REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUD WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FO PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HER THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLIN BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM U RELIANCE UPON THIS INFORMATION.