# Safety Data Sheet

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

## Section 1: Identification

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

**Product Code** 50-1255

**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:** ------ H290 May be corrosive to metals ------ H314 Causes severe skin burns and eye damage ------ H318
**CFR 1910.1200** Causes serious eye damage ------ H319 Causes serious eye irritation ------ H402 Harmful to aquatic life

**Signal Word** DANGER

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

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

**Precautionary Statement(s):**

**Prevention** P234 - Keep only in original container. P260 - Do not breathe dust. P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves, protective clothing, and eye protection.

**Response** P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+P340 - IF INHALED: Remove person to fresh air and keep 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. P310 - Immediately call a POISON CENTER or doctor. P321 - Specific treatment (see section 4 on this SDS). P330 - Rinse mouth. P363 - Wash contaminated clothing before reuse. P390 - Absorb spillage to prevent material damage.

**Storage** P405 - Store locked up. P406 - Store in corrosive resistant container with a resistant inner liner.

**Disposal** P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

## Section 3: Composition/Information on Ingredients

**Substance/Mixture** Mixture
**Components** Postassium hydroxide and water
**% By Weight** Potassium hydroxide:85-90%, Water:10-15%
**CAS#** 1310-58-3, 7732-18-5
**Molecular Weight** 56.11 g/mole
**Chemical Formula** KOH
**Synonym(s)** Not available.

**Mixtures**

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|---|---|---|---|---|
| Potassium hydroxide | 1310-58-3 | 85-90 | CEIL: 2 (mg/m3) | ORAL (LD50): Acute: 273mg/kg [Rat]. 365 mg/kg [Rat]. |
| Water | 7732-18-5 | 10-15% | N/A | N/A |
| Carbonic acid, dipotassium salt | 584-08-7 | 1 - 5+ | N/A | N/A |

## Section 4: First-Aid Measures

**Inhalation** Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**Skin Contact** Remove contaminated clothing. Drench affected area with water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

**Eye Contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

**Ingestion** Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

**Symptoms/Effects**

**Acute** General: Harmful if swallowed. Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Inhalation: May be corrosive to the respiratory tract. Skin Contact: Causes severe skin burns. Redness. Pain. Blisters. Permanent damage. Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva. Can cause blindness. Ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

**Delayed** General: Harmful if swallowed. Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Inhalation: May be corrosive to the respiratory tract. Skin Contact: Causes severe skin burns. Redness. Pain. Blisters. Permanent damage. Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva. Can cause blindness. Ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

**Immediate Medical Attention**

Not available.

## Section 5: Fire-Fighting Measures

**Suitable Extinguishing Media**

Use extinguishing media appropriate for surrounding fire. Dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide.

**Unsuitable Extinguishing Media**

Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Products of Combustion**

Fire Hazard: Not flammable. Explosion Hazard: Product is not explosive, however in contact with incompatabilities may release explosive hydrogen gas. Reactivity: Reacts exothermically with (some) acids. Reacts violently with water. Corrosive to metals. In contact with metals, emits flammable/explosive gas.

**Firefighters Special Equipment and Precautions**

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Firefighting Instructions: Use water spray or fog for cooling exposed containers. Water may be ineffective to fight fire, but water should be used to keep exposed containers cool. Do not breathe fumes from fires or vapors from decomposition. Do not allow run-off from fire-fighting to enter drains or water courses. Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Hazardous Combustion Products: Corrosive vapors. Other Information: Potassium hydroxide reacts exothermically with water. Water spray may be ineffective.

## Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust. For Non-Emergency Personnel Protective Equipment: Use appropriate personal protective equipment (PPE). Emergency Procedures: Evacuate unnecessary personnel. For Emergency Personnel Protective Equipment: Equip cleanup crew with proper protection. Emergency Procedures: Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so. Environmental Precautions Prevent entry to sewers and public waters. Methods and Materials for Containment and Cleaning Up For Containment: Contain and collect as any solid. Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spill. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. For liquid spill, cautiously neutralize spill, absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill.

PCCA

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## Section 7: Handling and Storage

Precautions for Safe Handling  Additional Hazards When Processed: May be corrosive to metals.  Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.  Conditions for Safe Storage, Including Any Incompatibilities Technical Measures: Comply with applicable regulations.  Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container. Keep/Store away from extremely high or low temperatures and incompatible materials.  Incompatible Materials: Heat sources. Strong acids. Strong oxidizers. Halogens. Organic materials. Lead. Aluminum. Copper. Tin. Zinc. Bronze. Metals.
Specific End Use(s)  Food and Pharmaceutical Ingredient. Food additive, acid neutralization, industrial use.

## Section 8: Exposure Controls/Personal Protection

**Exposure Limits** USA ACGIH ACGIH Ceiling (mg/m³) 2 mg/m³  USA NIOSH NIOSH REL (ceiling) (mg/m³) 2 mg/m³

**Engineering Controls** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protection** Personal Protective Equipment: Gloves. Protective goggles. Protective clothing. Face shield. Insufficient ventilation: wear  respiratory protection. Materials for Protective Clothing: Chemically resistant materials and fabrics.  Hand Protection: Wear chemically resistant protective gloves.  Eye Protection: Chemical safety goggles and face shield.  Skin and Body Protection: Wear suitable protective clothing. Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.  Other Information: When using, do not eat, drink or smoke.

## Section 9: Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | Opaque white solid |
| **Odor** | Odorless. |
| **Odor Threshold** | Not available |

| | | | |
|---|---|---|---|
| **Melting Point** | 318.4 °C (605.12 °F) | **pH** | 14 (5% Solution) |
| **Freezing Point** | Not available | **Vapor Pressure** | Not applicable. |
| **Boiling Point/Range** | 1390 °C (2534 °F) | **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)** | 90 g/100 g water at 20°C (68 °F) |
| **Other** | Not available |

## Section 10: Stability and Reactivity

| | |
|---|---|
| **Reactivity** | Reacts exothermically with (some) acids. Reacts violently with water. Corrosive to metals. In contact with metals, emits flammable/explosive gas. |
| **Chemical Stability** | Stable under normal conditions. |
| **Hazardous Polymerization** | Hazardous polymerization will not occur. |
| **Conditions to Avoid** | Extremely high or low temperatures. Incompatible materials. Sources of ignition. |
| **Incompatible Materials** | Strong acids. Strong oxidizers. Heat sources. Halogens. Organic materials. Lead. Aluminum. Copper. Tin. Zinc. Bronze. Metals. May be corrosive to metals. |
| **Hazardous Decomposition Products** | Thermal decomposition generates: Corrosive vapors. Hydrogen gas. Potassium oxides. Absorbs atmospheric CO2. |

## Section 11: Toxicological Information

**RTECS** TT2100000

**Acute Toxicity**

ATE (Oral) 333.00 mg/kg body weight Potassium hydroxide (1310-58-3) LD50 Oral Rat 333 mg/kg Carbonic acid, dipotassium salt (584-08-7) LD50 Oral Rat 1870 mg/kg LD50 Dermal Rabbit > 2000 mg/kg

**Skin Corrosion/Irritation**

Causes severe skin burns and eye damage.

**Serious Eye Damage/Irritation**

Causes serious eye damage.

**Respiratory or Skin Sensitization**

Not available

**Germ Cell Mutagenicity**

Not available

**Carcinogenicity**

Not available

**Reproductive Toxicity**

Not available

**Routes of Entry**
Oral: Harmful if swallowed. Skin. Eye.

**Symptoms Related to Exposure**
May be corrosive to the respiratory tract. Causes severe skin burns. Redness. Pain. Blisters. Permanent damage. Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva. Can cause blindness. Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard

**Potential Health Effects**
Not available

**Target Organ(s)** Not available

## Section 12: Ecological Information

**Ecotoxicity**
Carbonic acid, dipotassium salt (584-08-7) EC50 Daphnia 1 630 mg/l

**Persistance and Degradability**
Not available.

**Bioaccumulative Potential**
Potassium hydroxide (1310-58-3) Log Pow 0.65

**Mobility in Soil**
Not available

**Other Adverse Effects**
Avoid release to the environment.

## Section 13: Disposal Considerations

**Waste Disposal**
Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way. Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Disposal of Container**
Not available.

**Other Considerations**
Not available

## Section 14: Transport Information

**DOT Classification**
CLASS 8: Corrosive material. Indentification: Potassium hydroxide : UN1813 PG: II Marine Pollutant : No ERG Number : 154

## Section 15: Regulatory Information

**Regulations**
US Federal Regulations Chemical Name (CAS No.) CERCLA RQ EPCRA 304 RQ SARA 302 TPQ SARA 313 Potassium hydroxide (1310-58- 3) 1000 lb Not applicable Not applicable No Carbonic acid, dipotassium salt (584-08-7) Not applicable Not applicable Not applicable No SARA 311/312 Potassium Hydroxide Pellets, ACS, NF Immediate (acute) health hazard US TSCA Flags Not present US State Regulations California Proposition 65 Chemical Name (CAS No.) Carcinogenicity Developmental Toxicity Female Reproductive Toxicity Male Reproductive Toxicity Potassium hydroxide (1310-58- 3) No No No No Carbonic acid, dipotassium salt (584-08-7) No No No No State Right-To-Know Lists Potassium hydroxide (1310-58-3) U.S. - Massachusetts - Right To Know List - Yes U.S. - New Jersey - Right to Know Hazardous Substance List - Yes U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - Yes U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No U.S. - Pennsylvania - RTK (Right to Know) List - Yes Carbonic acid, dipotassium salt (584-08-7) U.S. - Massachusetts - Right To Know List - No U.S. - New Jersey - Right to Know Hazardous Substance List - No U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No U.S. - Pennsylvania - RTK (Right to Know) List - No

**Other**

WHMIS (Canada) CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS E: Corrosive solid.;DSCL (EEC) R35- Causes severe burns.;Gloves.;Synthetic apron.;Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.;Splash goggles.

## Section 16: Other Information

Not available.