

# **Safety Data Sheet**

# Potassium Hydroxide Pellet NF

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Potassium Hydroxide Pellet NF

Synonyms/Generic Names: Caustic Potash

**Product Number: 4350** 

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)

www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

Hazard Not Otherwise Classified (HNOC): None

Signal Word: Danger

Pictograms:



#### **GHS Classification:**

| Corrosive to metals    | Category 1  |
|------------------------|-------------|
| Acute toxicity, Oral   | Category 4  |
| Skin corrosion         | Category 1A |
| Serious eye damage     | Category 1  |
| Acute aquatic toxicity | Category 3  |

#### **GHS Label Elements, including precautionary statements:**

#### **Hazard Statements:**

| • | nazara otatements. |  |  |
|---|--------------------|--|--|
|   | H301               | Toxic if swallowed.                      |  |
|   | H314               | Causes severe skin burns and eye damage. |  |
|   | H402               | Harmful to aquatic life.                 |  |
|   | H290               | May be corrosive to metals.              |  |

#### **Precautionary Statements:**

| _ |      |                                  |  |
|---|------|----------------------------------|--|
|   | P234 | Keep only in original container. |  |

Revised on 03/14/2022 Page 1 of 6

| P260           | Do not breathe dust/fume/gas/mist/vapors/spray.                            |  |
|----------------|--|--|
| P264           | Wash hands thoroughly after handling.                                      |  |
| P270           | Do not eat, drink or smoke when using this product.                        |  |
| 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.                         |  |
| 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.               |  |
| P363           | Wash contaminated clothing before reuse.                                   |  |
| P390           | Absorb spillage to prevent material-damage.                                |  |
| P405           | Store locked up.   |  |
| P406           | Store in corrosive resistant container with a resistant liner.             |  |
| P501           | Dispose of contents/container in accordance with local regulations.        |  |

#### **Potential Health Effects**

| Eyes       | Causes eye irritation.   |  |
|------------|--|--|
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation.  |  |
| Skin       | May be harmful if absorbed through skin. Causes skin irritation. |  |
| Ingestion  | gestion May be harmful if swallowed.                             |  |

# **NFPA Ratings**

| Health          | 3             |
|-----------------|---------------|
| Flammability    | 0             |
| Reactivity      | 2             |
| Specific hazard | Not Available |

#### **HMIS Ratings**

| Health     | 3 |
|------------|---|
| Fire       | 0 |
| Reactivity | 2 |

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component           | Weight % | CAS#      | EINECS# /<br>ELINCS# | Formula | Molecular<br>Weight |
|---------------------|----------|-----------|----------------------|---------|---------------------|
| Potassium Hydroxide | -        | 1310-58-3 | 215-181-3            | KOH     | 56.11 g/mol         |

# 4. FIRST-AID MEASURES

| Eyes       | Immediately rinse with plenty of water for at least 15 minutes and seek medical attention immediately. |  |
|------------|--|--|
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not            |  |
|            | breathing, give artificial respiration. Get medical attention immediately.                             |  |
| Skin       | Immediately flush with plenty of water for at least 15 minutes while removing contaminated             |  |
|            | clothing and wash using soap. Get medical attention immediately.                                       |  |
| Ingestion  | <b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If               |  |
|            | conscious, wash out mouth with water. Get medical attention immediately.                               |  |

# **5. FIRE-FIGHTING MEASURES**

| Suitable (and unsuitable) extinguishing media | Product is not flammable. Use appropriate media for adjacent fire.  Cool unopened containers with water. |  |
|---|--|--|
| Special protective equipment                  | Wear self-contained, approved breathing apparatus and full protective                                    |  |
| and precautions for                           | clothing, including eye protection and boots.  |  |
| firefighters                                  |  |  |

Revised on 03/14/2022 Page 2 of 6

| Specific hazards arising from | Emits toxic fumes (potassium oxides) under fire conditions. (See also |  |
|-------------------------------|---|--|
| the chemical                  | Stability and Reactivity section).                                    |  |

#### 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions,       | See section 8 for recommendations on the use of personal protective     |  |
|-----------------------------|---|--|
| protective equipment and    | equipment.  |  |
| emergency procedures        |   |  |
| Environmental precautions   | Prevent spillage from entering drains. Any release to the environment   |  |
|                             | may be subject to federal/national or local reporting requirements.     |  |
| Methods and materials for   | Pick up and arrange disposal without creating dust. Sweep up and        |  |
| containment and cleaning up | place in suitable, closed containers for disposal. Dispose of all waste |  |
|                             | and cleanup materials in accordance with regulations.                   |  |

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

#### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational exposure controls:

| Component           | Exposure Limits     | Basis | Entity |
|---------------------|---------------------|-------|--------|
| Potassium Hydroxide | 2 mg/m <sup>3</sup> | CEIL  | ACGIH  |
|                     | 2 mg/m <sup>3</sup> | CEIL  | NIOSH  |

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

#### **Personal Protection**

| Eyes       | Wear chemical safety glasses or goggles.  |
|------------|---|
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.   |
| Skin       | Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Other      | Not Available   |

#### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Revised on 03/14/2022 Page 3 of 6

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance (physical state, color, etc.)    | White solid.                             |
|---|--|
| Odor  | Odorless.                                |
| Odor threshold                              | Not Available                            |
| pH  | Not Available                            |
| Melting point/freezing point                | Not Available                            |
| Initial boiling point and boiling range     | Not Available                            |
| Flash point                                 | Not Flammable                            |
| Evaporation rate                            | Not Available                            |
| Flammability (solid, gas)                   | Not Flammable                            |
| Upper/lower flammability or explosive limit | Not Explosive                            |
| Vapor pressure                              | Not Available                            |
| Vapor density                               | Not Available                            |
| Density                                     | Not Available                            |
| Solubility (ies)                            | Easily soluble in cold water, hot water. |
| Partition coefficient: n-octanol/water      | Not Available                            |
| Auto-ignition temperature                   | Not Available                            |
| Decomposition temperature                   | Not Available                            |

# 10. STABILITY AND REACTIVITY

| Chemical Stability                 | Stable   |
|------------------------------------|--|
| Possibility of Hazardous Reactions | Will not occur.  |
| Conditions to Avoid                | Do not heat above melting point. Moisture.   |
| Incompatible Materials             | Nitro compounds, organic materials, magnesium, copper, water, metals, light metals, alkali metals, halogens, azides, anhydrides. |
| Hazardous Decomposition Products   | Potassium oxides.  |

# 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

| Skin        | Not Available               |
|-------------|-----------------------------|
| Eyes        | Not Available               |
| Respiratory | Not Available               |
| Ingestion   | LD50 Oral - rat - 273 mg/kg |

#### Carcinogenicity

| IARC  | No components of this product present at levels greater than or equal to 0.1% is |
|-------|--|
|       | identified as probable, possible or confirmed human carcinogen by IARC.          |
| ACGIH | No components of this product present at levels greater than or equal to 0.1% is |
|       | identified as a carcinogen or potential carcinogen by ACGIH.                     |
| NTP   | No components of this product present at levels greater than or equal to 0.1% is |
|       | identified as a known or anticipated carcinogen by NTP.                          |
| OSHA  | No components of this product present at levels greater than or equal to 0.1% is |
|       | identified as a carcinogen or potential carcinogen by OSHA.                      |

# Signs & Symptoms of Exposure

| Skin        | Irritation, redness, itchiness, pain.   |
|-------------|---|
| Eyes        | Irritation, redness, watering eyes, itchiness, burning sensation.               |
| Respiratory | Irritation, coughing, wheezing, burning of trachea and upper respiratory tract. |

Revised on 03/14/2022 Page 4 of 6

| Ingestion | Irritation, nausea, vomiting, diarrhea, painful or burning sensation of gastrointestinal |
|-----------|--|
|           | tract.   |

| Chronic Toxicity               | May cause damage to the following organs: upper respiratory tract, |  |
|--------------------------------|--|--|
|                                | skin, eyes.  |  |
| Teratogenicity                 | Not Available  |  |
| Mutagenicity                   | Not Available  |  |
| Embryotoxicity                 | Not Available  |  |
| Target Organ(s)                | Not Available  |  |
| Reproductive Toxicity          | Not Available  |  |
| Respiratory/Skin Sensitization | Not Available  |  |

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

| Aquatic Vertebrate   | LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h |
|----------------------|--|
| Aquatic Invertebrate | Not Available  |
| Terrestrial          | Not Available  |

| Persistence and Degradability | Not Available            |
|-------------------------------|--------------------------|
| Bioaccumulative Potential     | Not Available            |
| Mobility in Soil              | Not Available            |
| PBT and vPvB Assessment       | Not Available            |
| Other Adverse Effects         | Harmful to aquatic life. |

#### 13. DISPOSAL CONSIDERATIONS

| Waste Product or<br>Residues | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue. |
|------------------------------|---|
| Product<br>Containers        | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.  |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

# 14. TRANSPORTATION INFORMATION

| US DOT           | UN1813, Potassium hydroxide, solid, 8, pg II |
|------------------|--|
| TDG              | UN1813, POTASSIUM HYDROXIDE, SOLID, 8, PG II |
| IMDG             | UN1813, POTASSIUM HYDROXIDE, SOLID, 8, PG II |
| Marine Pollutant | No   |
| IATA/ICAO        | UN1813, Potassium hydroxide, solid, 8, pg II |

# 15. REGULATORY INFORMATION

| TSCA Inventory Status     | All ingredients are listed on the TSCA Active inventory. |
|---------------------------|--|
| DSL / NDSL                | All ingredients are listed on the DSL inventory.         |
| California Proposition 65 | Not Listed   |

Revised on 03/14/2022 Page 5 of 6

| Rhode Island: Hazardous Substance List            | Listed: Potassium Hydroxide                    |
|---|--|
| Massachusetts: Toxic or Hazardous Substance List, | Listed: Potassium Hydroxide                    |
| Right to Know                                     |  |
| Pennsylvania: Hazardous Substance List            | Listed: Potassium Hydroxide                    |
| New Jersey: Right to Know Hazardous Substance     | Listed: Potassium Hydroxide                    |
| List  |  |
| SARA 302  | Not Listed                                     |
| SARA 304  | Not Listed                                     |
| SARA 311  | Reactive Hazard, Acute Health Hazard.          |
| SARA 312  | Reactive Hazard, Acute Health Hazard.          |
| SARA 313  | Not Listed                                     |
| WHMIS Canada                                      | Class D1B: Poisonous and infectious material - |
|   | Immediate and serious effects – Toxic.         |
|   | Class E: Corrosive material.                   |

# **16. OTHER INFORMATION**

| Revision   | Date       |
|------------|------------|
| Original   | 01/20/2014 |
| Revision 1 | 01/13/2015 |
| Revision 2 | 01/17/2018 |
| Revision 3 | 03/14/2022 |

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Revised on 03/14/2022 Page 6 of 6