

SAFETY DATA SHEET

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: POTASSIUM HYDROXIDE FLAKE

Control Number: 00244

Product Description: Potassium Hydroxide

COMPANY IDENTIFICATION

Supplier: Chemical Distribution Solutions
1125 Oak St. Ste. 303

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC

General Information: (501) 978-1111

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification:

[Health]

Acute toxicity, Oral Category 4

Skin corrosion Category 1A

Serious eye damage Category 1

[Environmental]

Acute aquatic toxicity Category 3

[Physical]

Corrosive to metals Category 1

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard statement(s)

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H402 Harmful to aquatic life.

Precautionary statement(s)

P234 Keep only in original container.

P260 Do not breathe dust or mist.

P264 Wash skin 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 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

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 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

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SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Potassium Hydroxide	1310-58-3	100

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 immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash with soap and water. 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. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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 Potassium.

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: Not considered an explosion or fire hazard.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Suitable protective clothing should be worn. Shut off or plug source of spill.

Small spills: Sweep up and shovel into suitable container.

Large Spills: Contain spill. Salvage as much re-useable material as possible into a suitable container. Sweep up and shovel material into a container for disposal according to regulations.

SECTION 7 · STORAGE AND HANDLING

Handling: Do not get in eyes or on skin. Do not breathe dust or aerosols. Keep container closed and tightly sealed when not in use. Avoid formation of dust and aerosols.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers. Avoid contact with moisture.

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: Potassium Hydroxide 2 mg/m3 ACGIH 2 mg/m3 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.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Not flammable

Autoignition Temperature: no available data

Boiling Point Range: 2,408 °F

Melting/Freezing Point: 642 °F

Vapor Pressure: 1 mmHg

Vapor Density (Air-1): no available data

Appearance/ Odor: White to off white flakes, no odor

Flammability Limits: Not applicable

Specific Gravity: 2.04

Volatile %: nil

Evaporation Rate (Water=1): no available data

pH: 12-14 strength dependent

Solubility in Water: Soluble

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.

Conditions to Avoid: Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas.

Materials to Avoid: Acids, Flammable liquids, Halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

Decomposition Products: When combusted, oxides of potassium

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:

Eyes: May cause severe irritation such as burns, and eye damage.

Skin: May cause severe skin irritation and reddening of the skin. Prolonged exposure may cause burns, blistering.

Ingestion: May cause irritation of the membranes of the mouth and throat, stomach pain, and possible ulceration.

Inhalation: May cause burns, cough, and pulmonary edema, up to 48 hours after exposure. Avoid breathing vapors.

Acute oral toxicity:

LD50 rat: 333 mg/kg

Acute inhalation toxicity:

LD50 rat: No available data

Acute dermal toxicity:

LD50 rabbit: No available data

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SECTION 12 · ECOLOGICAL INFORMATION

Aquatic Toxicity: Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h

Bio-accumulative potential: The methods for determining the biological degradability are not applicable to inorganic substances.

Mobility: No data available

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.

SECTION 14 · TRANSPORTATION

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

Proper Shipping Name: Potassium hydroxide, solid

Hazard Class: 8

UN Number: 1813

Packaging Group: 2

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

Acute Health Hazard.

SARA Section 313 (40 CFR 372) Hazard Categories:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act: This product contains Potassium Hydroxide a chemical which is listed under the CWA.

Clean Air Act: None of the chemicals in this product are listed as Hazardous Substances under the CAA.

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: January 2015

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: 0

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.