

Silver Fern Chemical Inc.
SAFETY DATA SHEET
Potassium Hydroxide

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: POTASSIUM HYDROXIDE

Control Number: 0107

Product Description: Potassium Hydroxide Solution

COMPANY IDENTIFICATION Silver Fern Chemical, Inc.

Distributor: 2226 Queen Anne Avenue North
Seattle WA 98109, USA
Phone: 1-866-282-3384
Info@silverfernchemical.com

EMERGENCY PHONE NUMBER: 24 Hour Emergency Contact
Infotrac 1-800-535-5053 (USA & Canada)
Outside USA & Canada 1-352-323-3500

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals Category 1

Acute toxicity, Oral Category 4

Skin corrosion Category 1A

Serious eye damage Category 1

Short-term (acute) aquatic hazard Category 3

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.

H402 Harmful to aquatic life.

Precautionary statement(s)

P234 Keep only in original container.

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.

P390 Absorb spillage to prevent material damage.

P406 Store in corrosive resistant container with a resistant inner liner.

P501 Dispose of contents/ container to an approved waste disposal plant.



Silver Fern Chemical Inc.
SAFETY DATA SHEET
Potassium Hydroxide

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%Weight
Potassium Hydroxide	1310-58-3	10-45

Contains no impurities or stabilizing additives which themselves are classified and which contribute to the classification of this product.

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.

See Section 11 for **Signs and Symptoms of Exposure**

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: Use water spray to keep fire-exposed containers cool. Not considered an explosion or fire hazard.

SECTION 6 · ACCIDENTAL RELEASE MEASURES

Spills: Evacuate all non-essential personnel from the spill area. 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. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. 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.



Silver Fern Chemical Inc.

SAFETY DATA SHEET

Potassium Hydroxide

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide adequate 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

Physical State: Liquid

Appearance/Odor: Colorless / no odor

Odor threshold: No available data

pH: 12-14 strength dependent

Melting point: -128 to 39 °F

Initial boiling point and boiling range:

Flash point: Not flammable

Evaporation rate (BuAc=1): >1

Flammability (solid, gas): No available data

Flammability Limits: No available data

Vapor pressure (mmHg): No available data

Relative Vapor density (Air=1): No available data

Relative density: 1.09-1.52

Water Solubility: complete

Partition coefficient: n-octanol/water: No available data

Auto-ignition temperature: No available data

Decomposition temperature: No available data

Viscosity:

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

Possibility of Hazardous Reactions: Will not occur under normal use and temperature conditions.



Silver Fern Chemical Inc.
SAFETY DATA SHEET
Potassium Hydroxide

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

Germ Cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

STOT single exposure: See Section 2

STOT repeated exposure: Not classified

SECTION 12 - ECOLOGICAL INFORMATION

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

Bio-accumulative potential: No data available

Mobility: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine at the time of disposal, whether a discarded chemical is classified as a hazardous waste. Chemical additions, processing or otherwise altering this material may make waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. The transportation, storage, treatment and disposal of this waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. 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, solution

Hazard Class: 8

UN Number: 1814

Packaging Group: 2

Poison Inhalation Hazard: No



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SAFETY DATA SHEET
Potassium Hydroxide

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 has not been established. 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 on the Chemical Substance Inventory and designated as active in U.S. commerce.

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

SDS Revision Date: September 2022

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 information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.