

1. Product and Company Identification

www.rxmarine.com

Product Name [Potassium Hydroxide](#)
Part Number [RXSOL-19-1613-025](#)

Chemical Formula: KOH

Synonyms : caustic potash / caustic potash dry / caustic potash, dry solid, flake, bead or granular / caustic potash, solid / caustic potash solid / hydrate of potash / hydrate of potassium / hydroxide of potash / hydroxide of potassium / lye (potassium hydroxide) / potash / potash hydrate / potash lye / potassium hydrate / potassium hydroxide (K(OH)) / potassium hydroxide dry / potassium hydroxide pellets / potassium hydroxide, dry solid, flake, bead or granular / potassium hydroxide, electrolytical, solid / potassium hydroxide, solid / Potassium hydroxide, solid / potassium lye

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Kolkata, Chennai, Visakhapatnam, Surat, Fujairah, Muscat

Phone +91 22 65113333/ 5555 / 9999 / 27815540-42
Fax +91 22 2781 1318 ::::AOH :0091 9821214367
Email mail@rxmarine.com; 123@rxmarine.com

2. Composition / Information on ingredients

www.rxmarine.com

Chemical Name	Concentration	CAS Number	EC Number	R Phrases*	Sym Xn.
Potassium Hydroxide	30-36%	1310-58-3	215-181-3	22 / 35	Xn.

*See Section 16

3. Hazards Identification

www.rxmarine.com

Physical hazards	Causes severe skin burns and eye damage
Health hazards	Harmful if swallowed
Environmental Hazards	Aquatic Chronic 2 - H411
Potential Acute Health Effects	Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant, corrosive), of ingestion, of inhalation. The severity of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can result in inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening and blistering.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the substance can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated exposure can produce varying degree of respiratory irritation or lung damage.

4. First Aid Measures

www.rxmarine.com

Contact with skin	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean skin. Get medical attention immediately.
Contact with eyes	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Water may be used. Get medical attention immediately.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt, or waistband.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

General

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt, or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It is hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious, or otherwise hazardous. Seek immediate medical attention.

5. Fire-fighting Measures

www.rxmarine.com

Flammability of the Product	:	Non-flammable
Auto-Ignition Temperature	:	Not applicable.
Flash Points	:	Not applicable.
Flammable Limits	:	Not applicable.
Products of Combustion	:	Not applicable.
Fire Hazards in Presence of Various Substances	:	Metal , Acid
Explosion Hazards in Presence of Various Substances	:	Risks of explosion of the product under impact: Not available. Risk of explosion in the presence of static discharge: Not available.
Fire Fighting Media and Instructions	:	Not applicable.
Special Remarks on Fire Hazards	:	Violent reaction or ignition with strong oxidizing agents, acids, alcohols, p-lithium, cyclopentadiene, germanium, anhydride, nitroalkanes, peroxodisulfate, sugars, 2,2,4,4-tetrahydroxy-4,4-dimethyl-1,3-dioxane, dicarbide. Molten ortho -hydroxybenzoic acid reacts with potassium hydroxide. When heated, tetrachloroethane are heated, chloroacetylene, is formed. A solution of potassium hydroxide which is spontaneously flammable. Potassium hydroxide reacts with acids is spontaneously flammable. Potassium hydroxide is little Potassium hydroxide attacks metals such as aluminum, flammable hydrogen gas.
Special Remarks on Explosion Hazards	:	Potentially explosive reaction with chlorine dioxide, nitrobenzene, trichloride, peroxidized tetrahydrofuran. Reaction with ammonium hydroxide heat sensitive explosive product cause explosive decomposition will occur when potassium nitroso urea and methylene chloride explodes on contact with potassium hydroxide.

6. Accidental Release Measures

www.rxmarine.com

Personal Precautions	Wear protective clothing as per section 8.
Environmental Precautions	Avoid discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable material. The product contains substances which are water-soluble and may spread in water systems. The product contains substances which may spread in the atmosphere
Immediate Actions	Shut off source of leak if safe to do so.
Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a solution of acetic acid.
Large Spill	Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water to wash skin and eyes. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize with a dilute solution of acetic acid. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and Storage

www.rxmarine.com

Handling	Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, use suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as organic materials, metals, acids, moisture.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F)

8. Exposure controls and personal protection

www.rxmarine.com

Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below recommended limits.
Personal Protection	Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent.
Personal Protection in case of Large Spill	Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling.
Exposure Limits	CEIL: 2 (mg/m ³) from OSHA (PEL) [United States] CEIL: 2 (mg/m ³) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

www.rxmarine.com

Odour	:	Odourless
Taste	:	Sweetish, astringent.
Appearance	:	White
Molecular Weight	:	56.11 g/mole
pH (1% soln/water)	:	13
Boiling Point	:	Decomposition temperature
Melting Point	:	380°C (716°F)
Critical Temperature	:	Not available.
Specific Gravity	:	2.044 (Water = 1)
Vapor Pressure	:	Not available.
Vapor Density	:	Not available.
Volatility	:	Not available.
Odor Threshold	:	Not available.
Water/Oil Coeff	:	Not available.
Ionicity (in Water):	:	Not available.

Solubility	:	Easily soluble in cold water and ether.
------------	---	---

10. Stability and reactivity

www.rxmarine.com

Stability	:	The product is stable.
Instability Temperature	:	Not available
Conditions of Instability	:	Incompatible materials, dust or water.
Incompatibility with various substances	:	Highly reactive with acids. R metals, moisture.
Corrosivity	:	Extremely corrosive in presence of acids. Slightly corrosive in presence of alkalis. Non-corrosive in presence of organic solvents.
Special Remarks on Reactivity	:	Hygroscopic (absorbs moisture from water or alcohol or when the heat is generated. Reacts with halogenated hydrocarbons, anhydrides, isocyanates, aldehydes, alcohols, glycol solution. Also incompatible with (nitrobenzene, nitromethane, organic peroxide, oxidizing materials, acid anhydrides, acid chlorides, magnesium, peroxide, dioxide, maleic dicarbide, such as aluminum, tin, lead, zinc).
Polymerization	:	Will not occur.

11. Toxicological information

www.rxmarine.com

Routes of Entry	Absorbed through skin. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 273 mg/kg [Rat].
Chronic Effects on Humans	MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: upper respiratory tract, skin, eyes.
Other Toxic Effects on Humans	Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (corrosive, irritant). Very hazardous (corrosive), of ingestion, .
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Acute Potential Health Effects: Skin: Causes severe skin irritation and burns. Eyes: Causes severe eye irritation and irreversible eye injury. Inhalation: Causes severe irritation and burns of the respiratory tract and mucous membranes. Inhalation can lead to chemical pneumonitis Ingestion: Harmful if swallowed. May cause severe and permanent damage to the digestive tract with irritation and burns of the gastrointestinal (digestive) tract with abdominal pain, vomiting and possible death. May cause damage to the digestive tract. Chronic Potential Health Effects: Chronic contact with dilute solutions of potassium hydroxide can cause irritation of the skin. Inhalation can produce chronic productive cough, and shortness of breath.

12. Ecological information

www.rxmarine.com

Ecotoxicity	Ecotoxicity in water (LC50): 80 mg/l 24 hours [Mosquito Fish].
Mobility	Completely soluble in water
BOD5 and COD	Not available
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise
Special Remarks on the Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise

13. Disposal considerations

www.rxmarine.com

Disposal considerations	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
-------------------------	--

14. Transport information

www.rxmarine.com

- **DOT Classification:** Class 8: Corrosive material
- **Identification:** Potassium hydroxide, solid UNNA: 1813 PG: II
- **Special Provisions for Transport:** Not available.

15. Regulatory information

www.rxmarine.com

Federal and State Regulations	USA release reporting list: Potassium hydroxide Pennsylvania RTK: Potassium hydroxide Florida: Potassium hydroxide Massachusetts RTK: Potassium hydroxide New Jersey: Potassium hydroxide California I Hazardous Substances: Potassium hydroxide TSCA 8(b) inventory: Potassium hydroxide CERCLA: Hazardous substances.: Potassium hydroxide: 453.6 kg
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is in the Inventory of Existing Commercial Chemical Substances. Other Classifications: WHMIS (Canada): CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS E: Corrosive solid.
HMIS (U.S.A.):	Health Hazard: 3 Fire Hazard: 0 Reactivity: 2 Personal Protection: j
National Fire Protection Association	Health: 3 Flammability: 0 Reactivity: 1 Specific hazard: NA
Protective Equipment:	Gloves. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. respirator when ventilation is inadequate. Splash goggles.

16. Other information

www.rxmarine.com

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their use. In no event shall **Rx Marine International** be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or punitive damages, even if **Rx Marine International** has been advised of the possibility of such damages.*

DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use, preparation and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.