MATERIAL SAFETY DATA SHEET

Potassium Hydroxide

MSDS Name: Section	**Potassium hydroxide**
Synonyms:	

Company Identification: (INDIA)	Veritas House, 70 Mint Road, Fort, Mumbai - 400 001. INDIA
For information in the INDIA, call:	Tel: +91 - 22 - 2275 5555 / 6184 0000, Fax: +91 - 22 - 2275 5556 / 6184 0001

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
1310-58-3	Potassium hydroxide		215-181-3

Hazard Symbols:	C
	
Risk Phrases:	22 35

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. Causes severe burns. Hygroscopic (absorbs moisture from the air).Air sensitive.

Potential Health Effects

Eye:	Causes severe eye burns. May cause irreversible eye injury. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed. Causes redness and pain.
Skin:	May cause deep, penetrating ulcers of the skin. Causes severe burns with delayed tissue destruction. Causes redness and pain.
Ingestion:	Harmful if swallowed. May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death.
Inhalation:	Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Chronic:	Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

Section 4 - First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin:	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure.
Ingestion:	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation:	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Copyright © Groupe Veritas. All rights reserved.

Notes to Physician:	

Section 5 - Fire Fighting Measures

General Information:	Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. May react with metals and lead to the formation of flammable hydrogen gas.
Extinguishing Media:	Use extinguishing media most appropriate for the surrounding fire. DO NOT USE WATER!

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling:	Do not allow water to get into the container because of violent reaction. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.
Storage:	Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:	
	Use adequate ventilation to keep airborne concentrations low.
Exposure Limits	CAS# 1310-58-3:
	United Kingdom, WEL - STEL: 2 mg/m3 STEL
	Belgium - STEL: 2 mg/m3 VLE
	France - VLE: 2 mg/m3 VLE
	Japan: 2 mg/m3 Ceiling
	Malaysia: 2 mg/m3 Ceiling
	Spain: 2 mg/m3 VLA-EC
Personal Protective Equipment	
Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Respirators:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Solid
Color:	white
Odor:	odorless
pH:	13.5 (0.1M aq solution)
Vapor Pressure:	Not available

Copyright © Groupe Veritas. All rights reserved.

Viscosity:	Not available
Boiling Point:	1320 deg C @760mmHg (2,408.00°F)
Freezing/Melting Point:	360 deg C (680.00°F)
Autoignition Temperature:	Not available
Flash Point:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Decomposition Temperature:	Not available
Solubility in water:	1120 g/l (20°C)
Specific Gravity/Density:	
Molecular Formula:	KOH
Molecular Weight:	56.11

Section 10 - Stability and Reactivity

Chemical Stability:	Stable. Readily absorbs carbon dioxide and moisture from the air and deliquesces (to absorb atmospheric water vapor and become liquid).
Conditions to Avoid:	High temperatures, incompatible materials, dust generation, exposure to air, acids, metals, organic materials, exposure to moist air or water.
Incompatibilities with Other Materials	Water, metals, acid chlorides, aluminum, copper, glass, halogens, magnesium, nitro compounds, zinc, tin, acid anhydrides, nitromethane, chlorine dioxide, 2, 4, 6-trinitrotoluene, nitrobenzene.
Hazardous Decomposition Products	Oxides of potassium, hydrogen gas.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 1310-58-3: TT2100000
LD50/LC50:	RTECS: **CAS# 1310-58-3:** Draize test, rabbit, skin: 50 mg/24H Severe; Oral, rat: LD50 = 273 mg/kg;
Carcinogenicity:	Potassium hydroxide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	POTASSIUM HYDROXIDE, SOLID	POTASSIUM HYDROXIDE, SOLID	POTASSIUM HYDROXIDE, SOLID
Hazard Class:	8	8	8
UN Number:	1813	1813	1813

Copyright © Groupe Veritas. All rights reserved.

Packing Group:	II	II	II
USA RQ: CAS# 1310-58-3: 1000 lb final RQ; 454 kg final RQ			

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: C
Risk Phrases
➢ R 22 Harmful if swallowed.
➢ R 35 causes severe burns.
Safety Phrases:
➢ S 26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
➢ S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
➢ S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
WGK (Water Danger/Protection)
➢ CAS# 1310-58-3: 1
Canada
➢ CAS# 1310-58-3 is listed on Canada's DSL List
US Federal
➢ TSCA
➢ CAS# 1310-58-3 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:	July 22, 2015
Revision #0 Date	

The Information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, 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 particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

Copyright © Groupe Veritas. All rights reserved.