POTASSIUM HYDROXIDE

PRODUCT IDENTIFICATION

CAS NO. 1310-58-3 EINECS NO. 215-181-3 FORMULA KOH

MOL WT. 56.1 H.S. CODE 2815.20

TOXICITY Oral rat LD50: 273 mg/kg

SYNONYMS Potassium hydrate; Caustic potash; Lye; potassa;

Hydroxyde De Potassium (French); Potasse Caustique (French); Kaliumhydroxid (German);

K⁺ OH

Kaliumhydroxyde (Dutch); Potassa; Potassio Idrossido Di (Italian);

RAW MATERIALS CLASSIFICATION

GENERAL DESCRIPTION

Potassium Hydroxide, commonly called caustic potash with formula KOH, is a caustic compound of strong alkaline chemical dissolving readily in water, giving off much heat and forming a caustic solution. It is a white deliquescent solid in the form of pellets obtained by concentration of purified electrolytic potassium hydroxide solution with very low chloride content. It reacts violently with acid and is corrosive in moist air toward metals such as zinc, aluminium, tin and lead forming a combustible, explosive gas. It absorbs rapidly carbon dioxide and water from air. Contact with moisture or water will generate heat. Sodium hydroxide (Caustic soda) and potassium hydroxide (Caustic potash) are the two most important caustics. They are closely resembles in chemical properties and applications, e.g., in manufacturing liquid soap, in bleaching, and in manufacturing chemicals. Potassium hydroxide is the largest-volume potassium chemical for non-fertilizer use. Potassium Hydroxide is used in chemical manufacturing including potassium carbonate and other potassium chemicals, fertilizers, phosphates, agrochemicals, alkaline batteries and dyes.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE odorless white, deliquescent solid

MELTING POINT 360 C
BOLING POINT 1320 C
SPECIFIC GRAVITY 2.044
SOLUBILITY IN WATER Soluble

pH 13.5 (0.1 molar solution)

VAPOR DENSITY

AUTOIGNITION

NFPA RATINGS Health: 3; Flammability: 0; Reactivity: 1

REFRACTIVE INDEX

FLASH POINT Not combustible, but contact with water may generate heat

STABILITY Stable under ordinary conditions

APPLICATIONS

Potassium Hydroxide is used in chemical manufacturing including potassium carbonate and other potassium chemicals, fertilizers, phosphates, agrochemicals, alkaline batteries and dyes. It is also widely used in soap and bleaching industry.

SALES SPECIFICATION

APPEARANCE	white flakes
ASSAY	90.0% min
CARBONATE	0.5% max
CHLORIDES	0.01% max

SULPHATES	10ppm max
IRON	3max
HEAVY METAL	10ppm max
NICKEL	5ppm max
TRANSPORTATION	
PACKING	25kgs, 50kgs in bag
HAZARD CLASS	8 (Packing group: II)
UN NO.	1813
REMARKS	