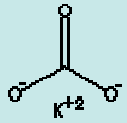
POTASSIUM CARBONATE



PRODUCT IDENTIFICATION	
CAS NO.	584-08-7
EINECS NO.	209-529-3
FORMULA	K_2CO_3
MOL WT.	138.21
H.S. CODE	2836.40
TOXICITY	Oral rat LD50: 1870 mg/kg
SYNONYMS	Potash; Salt of Tartar; Carbonic acid, Dipotassium salt; Potassium carbonate (2:1); Kaliumcarbonat; Pearl ash;
DERIVATION	by the reaction of carbon dioxide with potassium chloride + magnesium oxide (Engel-Precht process) or electrolytic caustic lye.
CLASSIFICATION	

PHYSICAL AND CHEMICAL PROPERTIES	
PHYSICAL STATE	white powder or granular
MELTING POINT	891 C
BOILING POINT	Decomposes
SPECIFIC GRAVITY	2.29
SOLUBILITY IN WATER	soluble (insoluble in alcohol)
pH	11.6 (Aqueous solution)
VAPOR DENSITY	
AUTOIGNITION	
NFPA RATINGS	Health: 2 Flammability: 0 Reactivity: 1
REFRACTIVE INDEX	
FLASH POINT	Not considered to be a fire hazard
STABILITY	Stable under ordinary conditions

APPLICATIONS

Potassium Carbonate is used in glasses, ceramics, explosives, fertilizers,and glazes industry, in the the manufacture of soft soaps, inorganic salts, and in dyeing and wool finishing.

SALES SPECIFICATION	
APPEARANCE	white powder
ASSAY	98.5% min
CHLORIDES	0.1% max
SULPHATES	0.1% max
Fe	0.003% max
WATER INSOLUBLES	0.05% max
HEAVY METALS	10ppm max
MEAN PARTICLE SIZE	0.25 - 1mm

TRANSPORTATION	
PACKING	50kgs in bag
HAZARD CLASS	listed on the TSCA inventory
UN NO.	

REMARKS

Commercially anhydrous and 1.5 hydrated forms are available. K_2CO_3 (melting point at 891 C) decomposes before boiled. $2K_2CO_3.3H_2O$ dehydrates to $K_2CO_3.H_2O$ at 100 C and to K_2CO_3 at 130 C.