

Summary Technical Data Sheet

Product Name: Potassium Carbonate 47% Soln.

CAS Number: 584-08-7

Formula: K_2CO_3

Molecular weight: 138.20 g/mol.

Grade: Technical



Product Specifications

Properties	Specification	Typical
Appearance:	Clear Colourless Liquid	
K_2CO_3 % b.wt.	min. 47	47.62
$KHCO_3$ % b.wt.	< 0.2	0.00
KOH	< 0.2	0.14
Na	< 0.2	0.09
Cl	< 50 ppm	0.00002
Fe	max.0.0002	0.00004
pH (1% solution)		11.5

Typical Properties

- Appearance: Clear Solution
- No Odour
- K_2CO_3 %: 47
- K_2O %: 32.04
- Specific Gravity @ 20°C: 1.496
- pH of K_2CO_3 @ 47%: 12.63

Potassium Carbonate 47% Soln.

Potassium carbonate 47% Soln. is used in a variety of industries; including industrial and household cleaners, agriculture, gas purification, tannery operations, electroplating, flameproofing, refrigeration, rubber additives, dye pigments, glass manufacturing, printed circuit board production, food preservation, pharmaceuticals, photographic chemicals, polymer catalysts, and the oil industry.

Cleaners are one of the oldest applications for potassium carbonates; including cleaning products used in the home, laundry detergents, degreasers, spot removers, such as dry cleaning, laundry, bleaching, liquid soaps and metal cleaners for surface finishing.

Specialty glass such as television glass accounts for a substantial portion of the consumption of potassium carbonate because the potassium salt is more compatible with the lead, barium, and strontium oxides contained in these glasses than is sodium carbonate. Video glass in television due to potassium carbonate possess improved properties of greater electrical resistivity, higher index of refraction, greater brilliance of luster, lower softening point and a wider temperature range. It is also used in laboratory glass, optical glass and tableware glass. It also has benefits as a colourant in glass and in ceramics. It is used especially in titanium dioxide ceramic composition that has been fused, quenched, and granulated for appliance industry.

In the food industry it is used as leavening agent in baked goods, debittering agent for cocoa beans, chocolate "alkalizing" or "Dutch" processing of cocoa powder, alfalfa drying, brewing beer, oriental noodles, effervescent mineral water, and additive in drying raisins. It has been used as an acidity regulator, buffering agents in many foods; bakery goods, soft drinks, confectionery, custard powder, mead and wine. In addition it has been used as cattle feed additive.

Potassium carbonates has been used for gas purification for the removal of carbon dioxide and other gases by absorption in following: natural gas, synthesis, hydrogen, synthetic natural gas, petrochemical products, dry ice, chemicals from hydrocarbon gases, and molten carbonates for removal of sulphur dioxide from flue gases.

Storage and Handling: Store in a cool dry place in a tightly closed container. Keep away from heat and contact with acids. It is incompatible with acids, alkaline metals, and excessive heat.

Packaging: 661.38 lb/300 kg UN HDPE drums, 3306.9 lb/1500 kg totes

Transport Regulations: Corrosive Liquid, N.O.S.(Potassium Carbonate) 8, UN 1760, PGII

The above information, while not guaranteed, reflects our analysis and believed to be accurate. It is the end user's responsibility, prior to use of the above mentioned product to determine the suitability of the product. Aqua Bond shall not be, directly or indirectly responsible for damages of any nature whatsoever resulting from the use or reliance upon the above information.