Potassium hydroxide
SigmaUltra

Product Number  P 5958
Store at Room Temperature

Product Description
Molecular Formula:  KOH
Molecular Weight:  56.11
CAS Number:  1310-58-3
Melting point:  360 °C, 380 °C (anhydrous)\(^1\)

This product is in the form of pellets. Trace elemental analyses have been performed on the SigmaUltra potassium hydroxide. The Certificate of Analysis provides lot-specific results. SigmaUltra potassium hydroxide is for applications which require tight control of elemental content.

Potassium hydroxide (KOH) is a caustic reagent that is widely used to neutralize acids and prepare potassium salts of reagents. It is used in a variety of large-scale applications, such as the manufacture of soap, the mercerizing of cotton, electroplating, photoengraving, and lithography.\(^1\)

Potassium hydroxide is used in the analysis of bone and cartilage samples by histology.\(^2,3\) A protocol for the amplification of DNA from single cells by PCR that incorporates KOH has been reported.\(^4\) The use of KOH in studies of the binding of intercalating anti-cancer drugs to nucleic acids has been investigated.\(^5\)

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (100 mg/ml), yielding a clear, colorless solution. Potassium hydroxide is also soluble in alcohol (1 part in 3) and glycerol (1 part in 2.5). The dissolution of potassium hydroxide in water or alcohol is a highly exothermic (heat-producing) process.\(^1\)

Storage/Stability
Potassium hydroxide rapidly absorbs carbon dioxide and water from the air and deliquesces.\(^1\) Potassium hydroxide solutions should be stored in plastic bottles (polyethylene or polypropylene). KOH solutions will etch glass over a period of just a few days.

References
1. The Merck Index, 12th ed., Entry# 7806.