Barium chloride dihydrate

Product Number  B0750
Store at Room Temperature

Product Description
Molecular Formula:  \(	ext{BaCl}_2 \cdot 2\text{H}_2\text{O}\)
Molecular Weight:  244.3
CAS Number:  10326-27-9
Melting Point:  963 °C

Barium chloride is an inorganic reagent that is used in the manufacture of pigments and glass, and as a mordant for acid dyes. It is also utilized in the weighting and dyeing of textile fabrics, in boiler compounds for softening water, and in the tanning and finishing of leather.\(^1\)

\(\text{BaCl}_2\) has been frequently used in ion channel studies in such systems as \textit{Xenopus}, mouse myocytes, bovine adrenal glomerulosa cells, and \textit{Arabidopsis thaliana}.\(^2^3^4^5\) In a fermentation study of pertussis toxin production from \textit{Bordetella pertussis}, \(\text{BaCl}_2\) has been shown to enhance the yield of pertussis toxin.\(^5\)

The isolation of ostrich prothrombin from plasma using \(\text{BaCl}_2\) has been described.\(^7\)

Several reports have described the synthesis of various barium oxalate compounds.\(^8^9\)

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), with heat as needed, yielding a clear, colorless solution.

References
1. The Merck Index, 12th ed., Entry# 998.
9. Christensen, A. N., et al., Synthesis and characterization of the barium oxalates \(\text{BaC}_2\text{O}_4 \cdot 0.5\text{H}_2\text{O}, \alpha-\text{BaC}_2\text{O}_4\) and \(\beta-\text{BaC}_2\text{O}_4\). Acta Crystallogr. B, 58(Pt 5), 808-814 (2002).