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ProductInformation

Potassium bromide

Product Number **P 5510**
Store at Room Temperature

Product Description

Molecular Formula: KBr
Molecular Weight: 119.0
CAS Number: 7758-02-3
Melting Point: 730 °C[1]
Density: 2.75 g/cc[1]

This product is designated as IR grade. It has been tested to be suitable for use in infrared spectroscopy and in Fourier Transform infrared (FT-IR) spectroscopy.

Potassium bromide is a salt that is used in the manufacture of photographic papers and plates, and in process engraving.[1] KBr is also utilized in the characterization of compounds by infrared spectroscopy.[2,3]

KBr has been used in the isolation of plant plasma membrane proteins, insect high density lipoproteins, and histidine-tagged apoflavoproteins.[4,5,6] Capillary electrophoresis of double stranded DNA in isoelectric buffers in the presence of competing, nonamphoteric ion sources such as KBr has been studied.[7]

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. It is also soluble in glycerol (217 mg/ml). Aqueous KBr solutions are neutral pH.[1]

Procedure

This product can be used for diffusive reflective IR (whereby the KBr powder is mixed with the product) as follows:

1. Grind the KBr powder very fine in an agate mortar and pestle.
2. Dry the ground KBr in a vacuum oven for approximately 3 hours at 75-80 °C.
3. Cool the product in a desiccator.
4. Make a KBr pellet and obtain the IR spectrum to ensure that a baseline with no peaks (no contaminants) is obtained.

References

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3. Forato, L. A., et al., Protein structure in KBr pellets by infrared spectroscopy. Anal. Biochem., **259(1)**, 136-141 (1998).
4. Santoni, V., et al., Large scale characterization of plant plasma membrane proteins. Biochimie, **81(6)**, 655-661 (1999).
5. Jouni, Z. E., et al., α-cyclodextrin extracts diacylglycerol from insect high density lipoproteins. J. Lipid Res., **41(6)**, 933-939 (2000).
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7. Gelfi, C., et al., Capillary zone electrophoresis of ds-DNA in isoelectric buffers: effect of adding of competing, nonamphoteric ions. Electrophoresis, **19(10)**, 1704-1710 (1998).

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