1-Methylimidazole

Product Number M 8878
Storage Temperature 2-8 °C

Product Description
Molecular Formula: C₄H₆N₂
Molecular Weight: 82.11
CAS Number: 616-47-7
Density: 1.03 g/ml
pKₐ (protonated cation): 7.06

1-Methylimidazole is a derivative of imidazole that is utilized in the manufacture of such classes of items as pharmaceuticals, pesticides, ion-exchange resins, dye intermediates, textile auxiliaries, photographic chemicals, and corrosion inhibitors. It is also used as a catalyst for manufacturing polyurethanes and a curing agent for epoxy resins. 1-Methylimidazole has been utilized in the synthesis of inorganic complexes, ionic liquids, and catalytic deprotonation reagents. The use of 1-methylimidazole in the preparation of GDP-hexanolamine for the purification of fucosyltransferases has been reported.

An investigation of the kinetics of copper uptake by apoazurin has used 1-methylimidazole as a buffer over the pH range 7-9. 1-Methylimidazole has been utilized as a buffer in a study of nucleotide binding to the sarcoplasmic reticulum Ca⁺²-ATPase. An investigation of hydrogen bonding of substrates to a heme-pocket water in the Bradyrhizobium japonicum FixL heme domain that uses 1-methylimidazole has been published.

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

Preparation Instructions
This product is soluble in water (50 mg/ml), yielding a clear, colorless solution.

References