

EGTA [ethylenebis (oxyethylenenitrilo) tetraacetic

CAS Number: 67-42-5

Storage Temperature: Room Temperature

Product Description :

Appearance: White crystalline powder

Molecular formula: C₁₄H₂₄N₂O₁₀

Molecular weight: 380.35

EGTA is a reagent that is used to chelate Ca²⁺ in the presence of Mg²⁺. EGTA chelates Ca²⁺ at a ratio of 1:1. The log (stability constants) for several cations are as follows:

Mg²⁺ = 5.2 Ca²⁺ = 11.0 Mn²⁺ = 12.1 Fe²⁺ = 11.8

Co²⁺ = 12.3 Ni²⁺ = 11.8 Cu²⁺ = 17.7 Zn²⁺ = 12.9

EGTA can be used as an anti-coagulant when dissolved at 1 g per 100 ml of blood. EDTA is more commonly used for the same purpose; either agent chelates the calcium ion from blood.

Preparation Instructions:

This product is soluble in 1 M NaOH (38 mg/ml, or 0.1 M), yielding a clear, colorless solution. A saturated solution at room temperature was found to be 2 mM in EGTA and had a pH of 2.72. This product has the following maximal solubilities in aqueous media at the respective pH values:

pH 8.48 > 0.52 M

pH 5.4 > 0.48 M

pH 4.5 = 0.45 M

pH 4.2 = 0.42 M

pH 4.0 = 0.31 M

Precautions and Disclaimer :

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