Potassium thiocyanate
ACS Reagent

Product Number 20,779-9
Store at Room Temperature

Exact replacement for Product Number P 3048

Product Description
Molecular Formula: KSCN
Molecular Weight: 97.18
CAS Number: 333-20-0
Melting Point: approximately 173 °C
Synonyms: potassium sulfocyanate, potassium rhodanide

This product is designated as ACS Reagent grade, and meets the specifications of the American Chemical Society (ACS) for reagent chemicals.

Potassium thiocyanate is an inorganic reagent used in the printing and dyeing of textiles, in photography for toning, sensibilization, and stabilization, and the manufacture of herbicides, fungicides, and pesticides. It is also utilized in the synthesis of organic compounds, such as thiiranes, methylsulfanyl imidazoles, and thiolyated nucleosides.

KSCN has been utilized in protein crystallization as a substitute for DMSO and CsCl. A NMR study of salt sensitivity of pKₐ values of histidines in staphylococcal nuclease that uses KSCN has been reported. The effect of KSCN as an inhibitor and molybdenum ligand in the periplasmic nitrate reductase from Paracoccus pantotrophus has been investigated. The use of KSCN to induce interferon-γ aggregation has been studied by hydrogen-deuterium exchange and electrospray ionization mass spectrometry.

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. The aqueous dissolution of KSCN is an endothermic process and gives solutions of neutral pH. KSCN is also soluble in alcohol (83 mg/ml) and acetone (2 g/ml).

References
1. The Merck Index, 12th ed., Entry# 7866.