

GUANIDINE THIOCYANATE

GMP

CAS #: 593-84-0

 Formula: $C_2H_6N_4S$

F.W.: 118.16 g/mol

GTHI-4221

BIO PHARMA GRADE

ANALYSIS	SPECIFICATIONS
Absorbance (1.7M)	280 nm < = 0.300 a.u. 300 nm < = 0.050 a.u. 340 nm < = 0.030 a.u.
Appearance and Color	White Crystals
Assay, Dried Basis	99.0 – 101.0%
Enzymes	DNase None Detected Protease None Detected RNase None Detected
Identification, IR	Conforms to Reference Standard
Loss on Drying	< = 0.5%
Melting Range	115 – 121°C
pH (5%)	5.0 – 7.0
Sulfated Ash	< = 0.5%
Sulfate	< = 50 ppm
Trace Metals	Arsenic (As) < = 5 ppm Aluminum (Al) < = 5 ppm Barium (Ba) < = 5 ppm Bismuth (Bi) < = 5 ppm Calcium (Ca) < = 10 ppm Cadmium (Cd) < = 5 ppm Chromium (Cr) < = 5 ppm Cobalt (Co) < = 5 ppm Copper (Cu) < = 5 ppm Iron (Fe) < = 5 ppm Potassium (K) < = 50 ppm Lead (Pb) < = 5 ppm Lithium (Li) < = 5 ppm Magnesium (Mg) < = 5 ppm Manganese (Mn) < = 5 ppm Molybdenum (Mo) < = 5 ppm Sodium (Na) < = 5000 ppm Nickel (Ni) < = 5 ppm Strontium (Sr) < = 5 ppm Zinc (Zn) < = 5 ppm

General Product Overview

This is a high purity, reagent grade product, purified under cGMP conditions. Guanidine Thiocyanate is a chaotropic agent. As one of the strongest protein denaturants, it inactivates nucleases more efficiently than Guanidine Hydrochloride. Guanidine Thiocyanate is preferred for the purification of RNA because it dissociates the RNA into its nucleic acids and protein forms. Higher molarity solutions of Guanidine Thiocyanate irreversibly inactivate RNase. Guanidine Thiocyanate causes proteins to dissolve readily, thus disintegrating cellular structures.

Industry Application

Suitable for use in biological and biotech chemical process applications from R&D through scale cGMP production.

Key Product Features

- Appears as a white crystalline product
- Manufactured in accordance with IPEC
- Manufactured in an enzyme free, hormone free and animal free environment
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: Guanidine Isothiocyanate

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf-Life Policy

Unless otherwise noted on the Shelf-Life Statement and CoA, this product has a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

Package Sizes

100g, 500g, 1kg, 5kg, 10kg, 25kg, 50kg

[Click here to view SDS, CoAs and other supporting regulatory documents on our website.](#)

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