

Certificate of Analysis

Product Name: Mercaptobenzothiazole (MBT)

Product Information

Product Number: MBT-CAS149304-202602 Batch Number: MBT-2026022001 Brand: SIGALD CAS Number: 149-30-4 MDL Number: MFCD00005918 Formula: C₇ H₅ NS₂ Formula Weight: 167.25 g/mol Quality Release Date: 20 FEB 2025

Test Item	Specification (Industrial Standard)	Result	Test Method
Appearance	Pale yellow to light brown crystalline powder, no mechanical impurities	Pale yellow crystalline powder	Visual Inspection
Purity (by Titration)	≥ 99.0%	99.4%	Potentiometric Titration (GB/T 11407-2013)
Melting Point Range	163-167°C	164.5-166.0°C	Capillary Melting Point Method
Ash Content	≤ 0.3%	0.15%	Gravimetric Method (GB/T 7531-2008)
Moisture Content (105°C, 2h)	≤ 0.5%	0.22%	Karl Fischer Titration
Heavy Metals (Pb)	≤ 0.0005%	0.0001%	Atomic Absorption Spectrometry (AAS)
Chloride (Cl ⁻) Content	≤ 0.01%	0.003%	Silver Nitrate Titration
Solubility in Ethanol (25°C)	≥ 10 g/100 mL	12.5 g/100 mL	Solubility Test Method

This batch of product has been tested in accordance with industrial standards for Mercaptobenzothiazole and meets all specified requirements. It is qualified for use.
Issue Date: 20 FEB 2025