

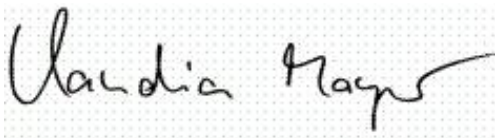
Certificate of Analysis

Product Name: Imidazole
puriss. p.a., >= 99.5 % GC
Product Number: 56750
Batch Number: STBJ4939
Brand: Sigma-Aldrich
CAS Number: 288-32-4
Formula: C₃H₄N₂
Formula Weight: 68.08
Quality Release Date: 09 DEC 2019
Recommended Retest Date: MAR 2024

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE TO FAINT YELLOW	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS OR FLAKES	FLAKES
TITRATION (NT) HClO ₄ 0.1M	99.50 - 100.50 %	100.30 %
PURITY (GC AREA %)	≥ 99.50 %	99.96 %
MELTING POINT	88 - 91 C	88 C
SOLUBILITY (COLOR)	COLORLESS	COLORLESS
SOLUBILITY (TURBIDITY)	CLEAR	CLEAR
SOLUBILITY (METHOD)	0.5G IN 10ML WATER	0.5G IN 10ML WATER
PH	9.5 - 11.0	10.2
WATER	≤ 0.5 %	< 0.1 %
RESIDUE ON IGNITION	≤ 0.1 %	< 0.1 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
METAL TRACE ANALYSIS (ICP)	CORRESPONDS TO REQUIREMENTS	CORRESPONDS
CALCIUM (ICP)	≤ 10 MG/KG	< 10 MG/KG
CADMIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
COBALT (ICP)	≤ 5 MG/KG	< 5 MG/KG
CHROMIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
COPPER (ICP)	≤ 5 MG/KG	< 5 MG/KG
IRON (ICP)	≤ 5 MG/KG	< 5 MG/KG
POTASSIUM (ICP)	≤ 50 MG/KG	< 50 MG/KG
MAGNESIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
MANGANESE (ICP)	≤ 5 MG/KG	< 5 MG/KG
SODIUM (ICP)	≤ 50 MG/KG	< 50 MG/KG
NICKEL (ICP)	≤ 5 MG/KG	< 5 MG/KG
LEAD (ICP)	≤ 5 MG/KG	< 5 MG/KG

Certificate of Analysis

ZINC (ICP)	≤ 5 MG/KG	< 5 MG/KG
TOTAL SULFUR AS SO₄ (ICP)	≤ 50 MG/KG	< 50 MG/KG
CHLORIDE (CL)	≤ 50 MG/KG	< 50 MG/KG



Claudia Mayer
Manager Quality Control
Steinheim, Germany

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.