Certificate of Analysis

Product Name: Isobutyric acid

puriss. p.a., >= 99.5 %

Product Number: 58360

Batch Number: STBF8413V Sigma-Aldrich

CAS Number: 79-31-2

Formula: (CH₃)₂CHCO₂H

Formula Weight: 88.11

Quality Release Date:22 SEP 2015Date retested:20 JAN 2020Recommended Retest Date:JUL 2024

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS	COLORLESS
APPEARANCE (FORM)	LIQUID	LIQUID
PURITY (GC AREA %)	≥ 99.50 %	99.73 %
REFRACTIVE INDEX N20/D	1.392 - 1.394	1.393
WATER	≤ 0.2 %	< 0.1 %
PROTON NMR SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
METAL TRACE ANALYSIS (ICP)	CORRESPONDS TO REQUIREMENTS	PASSED
ALUMINIUM (ICP)	≤ 0.5 MG/KG	< 0.5 MG/KG
BARIUM (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
BISMUTH (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
CALCIUM (ICP)	≤ 0.5 MG/KG	< 0.5 MG/KG
CADMIUM (ICP)	≤ 0.05 MG/KG	< 0.05 MG/KG
COBALT (ICP)	≤ 0.02 MG/KG	< 0.02 MG/KG
CHROMIUM (ICP)	≤ 0.02 MG/KG	< 0.02 MG/KG
COPPER (ICP)	≤ 0.02 MG/KG	< 0.02 MG/KG
IRON (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
POTASSIUM (ICP)	≤ 0.5 MG/KG	< 0.5 MG/KG
LITHIUM (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
MAGNESIUM (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
MANGANESE (ICP)	≤ 0.02 MG/KG	< 0.02 MG/KG
MOLYBDENUM (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
SODIUM (ICP)	≤ 2 MG/KG	< 2 MG/KG
NICKEL (ICP)	≤ 0.02 MG/KG	< 0.02 MG/KG
LEAD (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG
STRONTIUM (ICP)	≤ 0.1 MG/KG	< 0.1 MG/KG



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ZINC (ICP) $\leq 0.1 \text{ MG/KG}$ < 0.1 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.