

Certificate of Analysis

Product Name: L-ASPARAGINE
BioUltra

Product Number: 99979

Product Brand: Fluka

Molecular Formula:

Molecular Mass:

CAS Number:

TEST	SPECIFICATION	LOT BCBG0396V RESULTS
APPEARANCE (COLOR)	COLORLESS OR WHITE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	POWDER
TITRATION (NT) HClO ₄ 0.1M	99.5 - 100.5 %	100.3 %
PURITY (TLC AREA %)	≥ 99.0 %	100.0 %
SPECIFIC ROTATION (20/D)	35.0 ± 0.5 DEGREES	35.1 DEGREES
CONCENTRATION	--	C=5 IN HCL 5M
LOSS ON DRYING	≤ 0.1 %	< 0.05 %
RESIDUE ON IGNITION	≤ 0.05 %	<0.05%
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
METAL TRACE ANALYSIS (ICP)	CORRESPONDS TO REQUIREMENTS	PASSED
ALUMINIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
BARIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
BISMUTH (ICP)	≤ 5 MG/KG	< 5 MG/KG
CALCIUM (ICP)	≤ 50 MG/KG	< 50 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
LITHIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
MAGNESIUM (ICP)	≤ 50 MG/KG	< 50 MG/KG
MANGANESE (ICP)	≤ 5 MG/KG	< 5 MG/KG
MOLYBDENUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
SODIUM (ICP)	≤ 50 MG/KG	< 50 MG/KG

Certificate of Analysis

NICKEL (ICP)	≤ 5 MG/KG	< 5 MG/KG
LEAD (ICP)	≤ 5 MG/KG	< 5 MG/KG
STRONTIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
ZINC (ICP)	≤ 5 MG/KG	< 5 MG/KG
ARSENIC TRACES (MHS-AAS)	≤ 0.1 MG/KG	< 0.050 MG/KG
CHLORIDE (CL)	≤ 50 MG/KG	<25 MG/KG
SULFATE (SO4)	≤ 100 MG/KG	100 MG/KG
SOLUBILITY (METHOD)	--	0.396 G IN 30 ML H2O (0.1 M)
APPEARANCE (SOLUTION)	CLEAR COLORLESS	CLEAR COLORLESS
PH	4.0 - 5.5	4.6
RESIDUE (FILTER TEST)	NO RESIDUE	NO RESIDUE
UV - ABS. AT 260 NM	≤ 0.07	0.004
UV - ABS. AT 280 NM	≤ 0.06	0.002

QUALITY RELEASE DATE 15/JUL/11

RECOMMENDED RETEST DATE JUN/15



Dr. Claudia Geitner
 Manager Quality Control
 Buchs, Switzerland

Sigma-Aldrich guarantees the 'Sales-Specification' values only, additional lot specific tests may be included for further information. The current 'Sales-Specifications' sheet is available on request. For further inquiries, please contact our Technical Service. Sigma-Aldrich warrants, that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice for additional terms and conditions of sale. The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.