

## Certificate of Analysis

**Product Name:** SARCOSINE  
*BioUltra*  
**Product Number:** 99984  
**Product Brand:** Fluka  
**Molecular Formula:** C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>  
**Molecular Mass:** 89.09  
**CAS Number:** 107-97-1

TEST	SPECIFICATION	LOT BCBG4743V RESULTS
APPEARANCE (COLOR)	COLORLESS OR WHITE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	CRYSTALS
TITRATION (NT) HClO <sub>4</sub> 0.1M	99.0 - 101.0 %	99.7 %
LOSS ON DRYING	≤ 0.1 %	0.1 %
RESIDUE ON IGNITION	≤ 0.05 %	<0.05%
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)	≤ 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
LITHIUM (ICP)	≤ 5 MG/KG	< 5 MG/KG
MAGNESIUM (ICP)	≤ 5 MG/KG	< 5 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
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

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<b>ARSENIC TRACES (MHS-AAS)</b>	≤ 0.1 MG/KG	< 0.050MG/KG
<b>TOTAL SULFUR AS SO<sub>4</sub> (ICP)</b>	≤ 50 MG/KG	< 50 MG/KG
<b>CHLORIDE (CL)</b>	≤ 50 MG/KG	< 50MG/KG
<b>SOLUBILITY (METHOD)</b>	--	2.673 G IN 30 ML H <sub>2</sub> O (1 M)
<b>APPEARANCE (SOLUTION)</b>	CLEAR COLORLESS	CLEAR COLORLESS
<b>PH</b>	6.0 - 7.0	6.4
<b>RESIDUE (FILTER TEST)</b>	NO RESIDUE	NO RESIDUE
<b>UV - ABS. AT 260 NM</b>	≤ 0.05	0.047
<b>UV - ABS. AT 280 NM</b>	≤ 0.04	0.038

**QC RELEASE DATE** 05/SEP/11  
**RECOMMENDED RETEST DATE** AUG/15



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