

CERTIFICATE OF ANALYSIS

Product : L-SERINE
Product number : S0718
Batch number : 013839
Date of analysis : 29-12-2015
Date of expiry : 30-11-2018

Packaging and storage : store at room temperature in a well closed container

Amagranga	SPECIFICATION white crystalline powder	RESULT complies	UNITS	REMARKS
Appearance		complies		20°C / 250 g/l
Solubility	soluble in water			
Identification	conform	complies		IR
Specific rotation	+14.0 - +15.6	+15.1	0	at 25C
Ammonium	≤200	0.00	ppm	
Chloride	≤200	< 200	ppm	
Sulfate	≤300	< 200	ppm	
Iron	≤ 10	< 10	ppm	
Heavy metals	≤ 10	< 10	ppm	as Pb
Loss on drying	≤ 0.5	0.00	%	
Residue on ignition	≤ 0.1	0.00	%	
Methanol	≤200	189	ppm	
Assay	99.0 - 101.0	99.9	%	dried substance

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

drs. Q. de Hoog, pharmacist

Department of Quality Control Duchefa B.V.

Date: 20-06-2018

The buyer is responsible to test each batch to ensure the product is suitable for its specific purpose.