

## **CERTIFICATE OF ANALYSIS**

Product

L-GLUTAMINE

Product number Batch number

G0708 012654

:

Date of production Date of expiry

23-01-2015 31-01-2018

Packaging and storage

store at room temperature

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	crystalline powder, whitish	complies		1000 / 26 ~/
Solubility	soluble in water			18°C / 26 g/l
Identification	conform	complies		IR-spectrum
Specific rotation	+6.3 - +7.3	+6.5	0	<b>HCl-solution</b>
Heavy metals	< 5	< 5	ppm	
Loss on drying	≤ 0.3	0.24	%	
Residue on ignition	≤ 0.1	0.08	%	
Arsenic	≤ 1	complies	ppm	
Lead	≤3	complies	ppm	
Cadmium	≤ 1	complies	ppm	
Mercury	$\leq 0.1$	complies	ppm	
Microbiology:				
Aerobic plate count	≤ 1000	complies	cfu/g	
Yeast and moulds	≤ 100	complies	cfu/g	
Coliforms	negative	complies		
Salmonella	negative	complies		
Assay	98.5 - 101.5	98.8	%	

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

Conclusion: approved

Released by:

drs. M. van Wissen, pharmacist

Department of Quality Control Duchefa B.V.

Date: 10-01-2017

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

website: www.duchefa.com