

CERTIFICATE OF ANALYSIS

Product : **L-THREONINE**
 Product number : T0719
 Batch number : 012480
 Date of production : 25-11-2013
 Date of expiry : 30-11-2017

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

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white crystalline powder	complies		
Solubility	soluble in water	complies		
Identification	conform	complies		
Specific optical rotation	-29.0 – -27.6	-27.9	°	20 °C
pH	5.2 – 6.2	5.9		
Appearance of solution	clear and colourless	complies		
Ninhydrin positive substances	≤ 0.5	complies	%	
Chloride	≤ 200	complies	ppm	
Sulfate	≤ 200	complies	ppm	
Ammonium	≤ 200	complies	ppm	
Heavy metals	≤ 10	complies	ppm	as Pb
Iron	≤ 10	complies	ppm	
Related substances	conform	complies		
Loss on drying	≤ 0.20	0.02	%	
Residue on ignition	≤ 0.1	0.00	%	
Assay	99.0 – 101.0	100.0	%	

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: 28-10-2016



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