

# CERTIFICATE OF ANALYSIS

Product : **L-THREONINE**  
 Product number : T0719  
 Batch number : 017436  
 Date of production : 17-03-2020  
 Date of expiry : 31-03-2024

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	-28.3	°	20 °C
pH	5.0 – 6.5	5.76		
Appearance of solution	clear and colourless	complies		
Chloride	≤ 0.02	complies	%	
Sulfate	≤ 0.02	complies	%	
Ammonium	≤ 0.02	complies	%	
Heavy metals	≤ 10	complies	ppm	as Pb
Iron	≤ 10	complies	ppm	
Loss on drying	≤ 0.2	0.1	%	
Residue on ignition	≤ 0.10	0.06	%	
Assay	99.0 – 101.0	99.3	%	

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: 13-12-2022



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

Duchefa Biochemie B.V.