

## CERTIFICATE OF ANALYSIS

Product : **TYROSINE (L-)**  
 Product number : T0721  
 Batch number : 013445  
 Date of production : 03-05-2017  
 Date of expiry : 31-05-2020

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

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white crystalline powder or colourless crystals	complies		
Solubility	soluble in water	complies		0.4 g/l
Identification	conform	complies		IR-spectrum
Appearance of solution	clear and colourless	conform		
Specific optical rotation	-12.3 – -11.0	-11.65	°	dried substance
Ninhydrin positive substances	≤ 0.5	< 0.5		
Chloride	≤ 200	< 200	ppm	
Sulphate	≤ 300	< 300	ppm	
Ammonium	≤ 200	< 200	ppm	
Iron	≤ 10	< 10	ppm	
Heavy metals	≤ 10	< 10	ppm	as Pb
Loss on drying	≤ 0.5	< 0.5	%	
Sulphated ash	≤ 0.1	< 0.1	%	
Assay	99.0 – 101.0	99.3	%	

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

Conclusion: approved

Released by:

*plo*

drs. M. van Wissen, pharmacist  
 Department of Quality Control Duchefa B.V.

Date: 19-01-2018

*S. de Bree*  
*S. de Bree*

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