

CERTIFICATE OF ANALYSIS

Product : **L-TRYPTOPHAN**
 Product number : T0720
 Batch number : 014716
 Date of analysis : 01-10-2018
 Expiry date : 31-10-2023

Packaging and storage : store protected from light

	SPECIFICATION	RESULT	UNITS	REMARKS
Description	white to almost white crystalline powder	complies		
Identification	conform	complies		
Appearance of solution	conform	complies		1% in 1M HCl
Specific optical rotation	-33.0 – -30.0	-30.0	°	1% in H ₂ O
Ninhydrin-positive substances	conform	conform	%	HPLC
Impurity A and other related substances	conform	conform	%	HPLC
pH	5.5 – 7.0	6.0		1% in H ₂ O
Chlorides	≤ 200	< 200	ppm	
Sulphates	≤ 300	< 300	ppm	
Ammonium	≤ 200	< 200	ppm	
Iron	≤ 20	< 20	ppm	
Heavy metals	≤ 15	< 15	ppm	
Loss on drying	≤ 0.3	0.0	%	3 hr, 105 °C
Sulphated ash	≤ 0.1	0.0	%	
Assay	98.5 – 101.0	99.8	%	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: 16-07-2019

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