

CERTIFICATE OF ANALYSIS

Product : **ALANINE (L-)**
 Product number : **A0703**
 Batch number : **013534**
 Date of analysis : **06-02-2018**
 Date of expiry : **28-02-2021**

Packaging and storage : in a well closed container, protected from light

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white or almost white crystalline powder, or colourless crystals	complies		
Identification:				
- A (specific optical rotation)	+14.2 – +15.2	+14.4	°	dried substance
- B (IR-spectrum)	conform	complies		
Appearance of solution	clear and colourless	Complies		1 M H ₂ O
Ninhydrin-positive substances	≤ 0.1	complies		TLC
Chlorides	≤ 100	complies	ppm	
Sulphates	≤ 100	complies	ppm	
Ammonium	≤ 100	complies	ppm	
Iron	≤ 5	complies	ppm	
Heavy metals	≤ 10	complies	ppm	
Loss on drying	≤ 0.2	< 0.1	%	105 °C
Assay	≥ 99.0	99.9	%	dried substance

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

Conclusion: approved

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

Date: 08-02-2018



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