

CERTIFICATE OF ANALYSIS

Product : **TRIS ULTRAPURE**
 Product number : T1501
 Batch number : 009695
 Date of analysis : 20-05-2013
 Date of expiry : 31-05-2018

Packaging and storage : in a well closed container

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white crystalline solid	complies		
Absorbance	≤ 0.050	0.015		1 M, 290 nm
Identity	conform	complies		IR-spectrum
Insoluble matter	≤ 0.005	< 0.005	%	
Loss on drying	≤ 0.2	0.08	%	3 hrs 105 °C
Melting point	168 – 172	169.9	°C	
pH	10.5 – 11.5	10.8		1M H ₂ O 25°C
pKa	8.0 – 8.4	8.20		1M H ₂ O 20°C
Residue on ignition	≤ 0.1	< 0.1	%	
Solubility	clear, colourless	complies		1M H ₂ O 20°C
Heavy metals	≤ 1	< 1	ppm	as Pb
Iron (Fe)	≤ 1	< 1	ppm	
Chloride (Cl)	≤ 100	< 5	ppm	
Assay	99.9 – 100.5	100.1	%	titration
Related Substances	meets requirements	complies		TLC

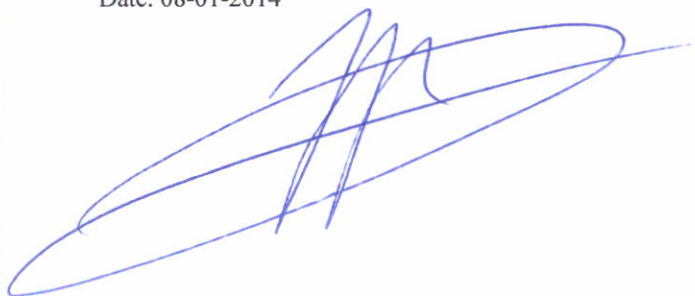
This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

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

Date: 08-01-2014



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