

## CERTIFICATE OF ANALYSIS

Product : **THIAMINE HYDROCHLORIDE**  
 Product number : T0614  
 Batch number : 014523  
 Date of production : 25-01-2019  
 Date of analysis : 13-02-2019  
 Date of expiry : 31-01-2024

Storage conditions : in well-closed non metallic container, protected from light

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white or almost white powder	complies		
Solubility	soluble in water	complies		
Identification	conform	complies		
Appearance of solution	clear and colour $\leq Y_7$ or $GY_7$	complies		5% in H <sub>2</sub> O
pH	2.7 – 3.3	3.1		2.5% in H <sub>2</sub> O
Nitrates	conform	complies		USP
Sulphates	$\leq 300$	< 300	ppm	
Heavy metals	$\leq 10$	< 10	ppm	
Lead	$\leq 1$	complies	ppm	
Zinc	$\leq 25$	$\leq 25$	ppm	
Nickel	$\leq 10$	complies	ppm	
Water	$\leq 5.0$	4.0	%	
Sulphated ash	$\leq 0.1$	< 0.1	%	
Absorption at 400 nm	$\leq 0.025$	0.008		USP, 10% in H <sub>2</sub> O
Related substances	conform	complies		
Residual solvents	conform	complies		ethanol
Assay	98.5 – 101.0	99.9	%	anhydrous substance

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

Conclusion: approved

Released by:



drs. J. van der Eem, pharmacist  
 Department of Quality Control Duchefa B.V.

Date: 25-04-2019

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