

CERTIFICATE OF ANALYSIS

Product : **NICOTINIC ACID**
Product number : N0611
Batch number : 014314
Date of analysis : 02-11-2018
Date of expiry : 30-11-2023

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

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white to almost white, crystalline powder	complies		
Identification	conform	complies		IR-spectrum
Solubility	soluble in water			20 °C / 18 g/l
Melting point	234 – 240	237	°C	
Absorption ratio	0.46 – 0.50	0.50		237nm:262 nm
Chloride (Cl)	≤ 200	≤ 200	ppm	
Sulphate (SO ₄)	≤ 200	≤ 200	ppm	
Arsenic (As)	≤ 3	≤ 3	ppm	
Copper (Cu)	≤ 25	≤ 25	ppm	
Lead (Pb)	≤ 10	≤ 10	ppm	
Palladium (Pd)	≤ 1	< 1	ppm	
Zinc (Zn)	≤ 25	≤ 25	ppm	
Residual solvents	excluded by production process			
Single related substances	≤ 0.05	complies	%	HPLC
Total related substances	≤ 0.20	0.04	%	HPLC
Sulphated ash	≤ 0.1	< 0.1	%	600 °C
Loss on drying	≤ 1.0	< 0.1	%	105 °C
Assay	98.0 – 102.0	100.3	%	dried 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: 01-02-2019

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