

## **CERTIFICATE OF ANALYSIS**

Product

CHOLINE CHLORIDE

Product number
Batch number
Date of analysis
Date of expiry

: C0605 : 013583 : 24-04-2017

30-04-2022

Packaging and storage

in a well closed, airtight container

Appearance Solubility Identification Acidity or alkalinity	SPECIFICATION white crystals soluble in water conform conform	RESULT complies complies complies	UNITS	REMARKS hygroscopic
Heavy metals	< 0.001	complies < 0.001	%	as Pb
Arsenic	≤ 0.0003	< 0.0003	%	43 1 0
Lead	≤ 0.0002	< 0.0002	%	
Ammonium	conform	complies		
1,4-Dioxane	conform	complies		
Residual solvents	excluded by manufacturing process	complies		ICH Q3C
Residue on ignition	≤ 0.05	< 0.05	%	
Loss on drying	≤ 1.5	0.1	%	
Water	$\leq$ 0.5	0.3	%	Karl Fischer
Assay	≥ 98.0	99.9	%	dried substance

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: 08-03-2018

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

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