

## Certificate of Analysis

## 1.09621.1000 Ethylene glycol for analysis EMSURE® Reag. Ph Eur,Reag. USP Batch K54106021

	Spec. Values		Batch Values	
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Purity (GC)	≥ 99.5	%	99.9	%
Identity (IR)	conforms		conforms	
Color	≤ 10	Hazen	< 5	Hazen
Acidity (as CH₃COOH)	≤ 0.001	%	< 0.001	%
Density (d 20 °C/20 °C)	1.113 - 1.115		1.115	
Density (d 25 °C/25 °C)	1.10 - 1.12		1.11	
Refractive index (n 20/D)	1.431 - 1.433		1.432	
Melting point	-1410	°C	-11	°C
Boiling point	196.5 - 198.5	°C	196.8	°C
Chloride (CI)	≤ 0.00002	%	≤ 0.00002	%
<sup>=</sup> e (Iron)	≤ 0.00005	%	≤ 0.00005	%
- Formaldehyde	≤ 0.005	%	≤ 0.005	%
Substances reducing potassium permanganate (as O)	≤ 0.0003	%	≤ 0.0003	%
Readily carbonizable substances	conforms		conforms	
Sulfated ash	≤ 0.005	%	< 0.005	%
Water	≤ 0.1	%	< 0.1	%

Date of release (DD.MM.YYYY) 03.03.2022 Minimum shelf life (DD.MM.YYYY) 31.03.2027

Jeannette David

Responsible laboratory manager quality control

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