



# Certificate of Analysis

1.03053.1000 N,N-Dimethylformamide for analysis EMSURE® ACS,ISO,Reag. Ph Eur  
Batch K54323653

	Spec. Values		Batch Values	
Purity (GC)	≥ 99.8	%	99.9	%
Identity (IR)	conforms		conforms	
Appearance	clear		clear	
Color	≤ 10	Hazen	< 5	Hazen
Titration acid	≤ 0.0005	meq/g	0.0001	meq/g
Titration base	≤ 0.003	meq/g	< 0.003	meq/g
Density (d 20 °C/20 °C)	0.949 - 0.952		0.950	
Refractive index (n 20/D)	1.429 - 1.431		1.431	
Boiling point	152 - 154	°C	152	°C
Al (Aluminium)	≤ 0.00005	%	≤ 0.00005	%
B (Boron)	≤ 0.000002	%	≤ 0.000002	%
Ba (Barium)	≤ 0.00001	%	≤ 0.00001	%
Ca (Calcium)	≤ 0.00005	%	≤ 0.00005	%
Cd (Cadmium)	≤ 0.000005	%	≤ 0.000005	%
Co (Cobalt)	≤ 0.000002	%	≤ 0.000002	%
Cr (Chromium)	≤ 0.000002	%	≤ 0.000002	%
Cu (Copper)	≤ 0.000002	%	≤ 0.000002	%
Fe (Iron)	≤ 0.00001	%	≤ 0.00001	%
Mg (Magnesium)	≤ 0.00001	%	≤ 0.00001	%
Mn (Manganese)	≤ 0.000002	%	≤ 0.000002	%
Ni (Nickel)	≤ 0.000002	%	≤ 0.000002	%
Pb (Lead)	≤ 0.00001	%	≤ 0.00001	%
Sn (Tin)	≤ 0.00001	%	≤ 0.00001	%
Zn (Zinc)	≤ 0.00001	%	≤ 0.00001	%
Evaporation residue	≤ 0.001	%	< 0.001	%
Water	≤ 0.10	%	0.01	%

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Responsible laboratory manager quality control

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