

CERTIFICATE OF ANALISYS

customer	Sergej Vogt Isolatech
product name	MONOPROPYLENE GLYCOL USP/EP/FCC Pharma Grade
IUPAC name	1,2-Propanediol
chemical formula	C3H8O2
other information	CAS: 57-55-6
packaging	bottel
amount	
batch number	88702390
mfg date	2024-07-11
exp date	2026-07-11

parameters	unit	specification	results
Turbidity	NTU	max. 3	<3
Monoethylene glycol	%	max. 0.1	<0.1
Diethylene glycol	%	max. 0.1	<0,1
Dipropylene glycol	%	max. 0.1	0,0434
Colour	APHA	max. 5	<5
Refractive index	[nd] 20oC	1.431 - 1.433	1,433
Sulphated ash	ppm	max. 70	<70
Chloride	ppm	max. 1	<1
Distillation range	oC	185 - 189	Pass
Oxidising substances	-	Compliance	Pass
Reducing substances	-	Compliance	Pass
Organic volatile impurities		Compliance	Pass
Heavy metals	ppm	max. 5	<5
Iron (Fe)	ppm	max. 0.3	<0,3
Arsenic (As)	ppm	max. 2	<2
Lead (Pb)	ppm	max. 1	<1
Cadmium (Cd)	ppm	max. 0.5	<0,5
Mercur (Hg)	ppm	max. 0.1	<0,1
Additional information		Store away from direct sunlight or ultraviolet light. Tightly reseal unused container. Store in a dry place. Storage temperature up to +40 oC.	-
Monopropylene glycol	%	min. 99.7	99,94
Water content	%	max. 0.1	0,0200
Specific weight (25 °C)	-	1.0350 - 1.0370	1,0355
Acidity (as acetic acid)	%	max. 0.002	0,0002
Sulphate	ppm	max. 60	0,6
Neutralisation number	mg KOH/g	max. 0.01	0,0020

We certify that the results are consistent with the manufacturer's certificate.

The certificate was created electronically and is valid without signature.