



Certificate of Analysis

Product Name: Propylene Glycol USP
Batch Number: 1P03-202311047
Quantity: 51600kg
Manufacturing Date: NOV.29, 2023
Expiry Date: NOV.28, 2025

Item	Unit	Specification	Result
MPG content	Wt %	99.80 min	99.90
Water	ppm	1000 max	275
Color	APHA	10	5
Acidity	ml	0.01 max	0.002
Burning residues	%	0.008 max	0
IBP	DegC	185 min	185
DP	DegC	190 max	188
Identification matches IR test		Passes Test	passed
Iron	ppm	0.5 max	< 0.5
Sulfate	ppm	10 max	< 10
Chloride	ppm	0.5 max	< 0.5
Heavy Metals(Pb)	ppm	5 max	< 5
Residue on Ignition	ppm	20 max	< 20
Specific Gravity	20/20degC	1.035-1.039	1.038
Refractive Index	nD20	1.431-1.435	1.432
Appearance		Colorless, Viscous, transparent liquid	Colorless, Viscous, transparent liquid
EG	ppm	50max	0
DEG	ppm	50max	0

Conclusion: The product of this batch can match USP Grade by analysis.