



山东石大胜华化工集团股份有限公司

Shandong Shida Shenghua Chemical Group Co., Ltd.

## Certificate of Analysis

Product Name: Propylene Glycol USP  
Batch Number: 1P03-202205026  
Quantity: 5160kgs  
Manufacturing Date: 02/6/2022  
Expiry Date: 01/6/2024

Item	Unit	Specification	Result
MPG content	Wt %	99.80 min	99.91
Water	ppm	1000 max	395
Color	APHA	10	5
Acidity	ml	0.01 max	0.002
IBP	DegC	186 min	186
DP	DegC	189 max	188
Iron	ppm	0.5 max	< 0.5
Sulfate	ppm	10 max	< 10
Chloride	ppm	1 max	< 1
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

Conclusion: The product of this batch can match the specification by analysis.

Authorized Signature