

P.O Box 239  
 Pearland, Texas 77588  
 Customer Service 866-901-2888



**501601**  
**P7601**

**Certificate of Analysis**

**Customer**

PDX CHEMICAL LLC

**Order Number:** SO15451  
**Ship Date:** 01/16/2025

**Vehicle Number:**  
**Estimated Quantity:** 8 DRUMS  
**Delivery No.:** 1344

**Product Name: Propylene Glycol USP Grade**

**Test Details**

Parameter	Unit	Specifications	
		Min	Max
<b>Lot: TCT-239919</b>			
<b>Manufacturer: Dow</b>			
<b>Manufacturer Batch: D357O88W81</b>			
Manufacturing Date: 08/08/2024			
Expiration Date: 08/08/2026			
Assay	99.95	%	99.80
Acidity	0.02	mL	0.20
Chlorides	< 70	ppm	70
Residue on Ignition, per 50g	0.0004	mg	3.50
Specific Gravity @ 25°C	1.036		1.037
Sulfate	< 60	ppm	60
Water Content	0.007	%	0.200
ID Test A, IR scan	Pass	-	-
ID Test B (DEG)	Pass	-	-
ID Test B (EG)	Pass	-	-
ID Test C (GC Scan)	Pass	-	-
Acidity	0.02	mL	0.05
Boiling Point	184	Deg C	189
Clarity	Pass	-	-
Color	Pass	-	-
Melting Point	125	Deg C	128
Oxidizing Substances, 0.05M Sodium thiosulfate	0.03	mL	0.20
Reducing Substances	Pass	-	-
Refractive Index @ 20°C	1.433		1.433
Relative Density @ 20°C	1.038		1.040
Sulfated Ash	< 0.0020	%	0.0100
Water Content	0.007	%	0.200
Assay	99.95	%	99.80
Acidity	Pass	-	-
Appearance, clear & colorless	Pass	-	-
Distillation, IBP	185.4	Deg C	185.0
Distillation, DP	187.2	Deg C	189.0
Lead (Pb)	< 1.0	ppm	1.0

This Certificate of Analysis contains the most current information available as of the print date.

Identification, IR Scan	Pass	-	-	-
Residue on Ignition	0.0004	%	-	0.0070
Specific Gravity @ 25°C	1.036		1.035	1.037
Water Content	0.007	%	-	0.200
Acidity	Pass	-	-	-
Arsenic	< 2.0	ppm	-	2.0
Chlorides	< 0.007	%	-	0.007
Distilling Range (184 – 189 degC)	98	% vol	95	-
Glycerine (Odor)	Pass	-	-	-
Heavy Metals	< 5.0	ppm	-	5.0
Melting Point	175	Deg C	174	178
Odor	Pass	-	Pass	-
Residue on Ignition	0.0004	%	-	0.0050
Specific Gravity @ 20°C	1.038		1.035	1.040
Sulfate	< 0.002	%	-	0.002
Water Content	0.007	%	-	0.500
Acidity, as acetic acid	0.0002	%	-	0.0020
Appearance, Clear, free of suspended matter	Pass	-	-	-
Chlorides	< 1.0	ppm	-	1.0
Color, Pt-Co	1		-	10
Dimer, Trimer % Higher Polymers	0.054	%	-	0.100
Ethylene Glycol	< 0.0080	%	-	0.0080
Diethylene Glycol	< 0.0080	%	-	0.0080
Odor, practically odorless	Pass	-	-	-
Iron	0.00	ppm	-	0.30
Specific Gravity @ 20°C	1.0381		1.0376	1.0389

**Notes:** (1) Agreed Specification limits – no results reported

Product meets or exceeds all requirements of the United States Pharmacopeia (USP), European Pharmacopeia (EP) and the Food Chemicals Codex (FCC)

Lot Number and Traceability

Traceability may be maintained through the lot number indicated in this document.

**Linda Qi**  
Quality Assurance

Print Date: 08/28/2024