CERTIFCATE OF ANALYSIS

Delivery Number Date: 2/5/2013 Container/Compartment Customer PO #

Product Name Propylene Glycol - USP

Test Details

Parameter	Results	Unit		
Batch 130300462		ű.	21	D
Acidity, as Acetic Acid	0.00	Wt.%		
Appearance	PASS	The state of the s		
Ash, Sulfated	< 0.000	Wt%		
Arsenic	< 1.00	ppm		
Assay, GC	99.92	Area %	* *	
Chloride, as Cl	< 0.1	Mg/kg		
Color	. 2	Pt-Co		
Heavy Metals as Lead	< 1.00	· ppm .	₩	
Infrared Scan	PASS	10 m		
Iron as Fe	0.02	ppm		
Organic Volatile Impurities	PASS	••		
Specific Gravity, 20/20° C	1.0383			
Specific Gravity 25/25° C	1.0358	80		
Sulfate	0.000	ppm	(K) 154	
Water	0.00	Wt.%	¥	
Refractive Index, 20	1.4325	°C		
IBP .	187.0	°C	ŝ.	
DP	188	°C		
Date of Manufacture	20130204	3		į.

Notes:

B.Hurtado/

Brian Hurtado, Lab Coordinator