

...Pure Quality

DATE: MAY 14, 2014

CERTIFICATE OF ANALYSIS

Glycerol (Meets USP Testing Specifications)

Catalog Number: CP-C1500

Lot Number: GC1005-121032

CAS Number:56-81-5Molecular Formula: $C_3H_80_3$ Molecular Weight:92.09Density:1.261Storage:Keep co

Storage: Keep cool Vegetable Base/Origin: Argentina **Date of Manufacture:** November 25, 2011 **Retest Date:** December 9, 2015

Test	Specification	Result
Appearance	Clear, viscous liquid	Conforms
Assay	≥99.50%	99.95%
Identification A	Passes USP test	Conforms
Identification B	≤0.1%	Conforms
Identification C	Passes USP test	Conforms
Specific Gravity (@25oC)	1.249	1.2604
Color APHA	≤20	7.0
Neutrality	7.0 ± 0.2	Conforms
Fatty acids & esters	≤1.0mL 0.5N NaOH	0.5mL
Total Impurities	≤1.0%	Conforms
Individual Impurities	≤0.01%	Conforms
Residue on ignition	≤100ppm	Conforms
Chlorinated compounds	≤0.003%	0.002%
Chlorides	≤10ppm	<10ppm
Sulfates	≤20ppm	<20ppm
Heavy Metals	≤5ppm	Conforms
		Approved by:
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		John Grubb, PhD
		QA/QC Ma <mark>nager</mark>