

CERTIFICATE OF ANALYSIS

Product Name GLYCERIN, Natural, Kosher
Grade Meets USP/NF Monographs
Catalog # 349000000
Lot # C20A06DRM0000GLY
Date of Manufacture: 05/25/19
Recommended Retest Date: Two Years from Date of Manufacture

TEST	SPECIFICATIONS	LOT ANALYSIS
Assay on anhydrous basis	99.0-101.0%	99.9%
Identification Test A	Conforms to Infrared Spectra	Pass
Identification Test B	Ethylene Glycol, NMT 0.1%	<0.1%
	Diethylene Glycol, NMT 0.1%	<0.1%
Identification Test C	Matches GC scan	Pass
Specific Gravity	NLT 1.249@25°C	1.262
Inorganic Impurities - Chloride and Sulfate (as Chloride)	NMT 10ppm	<10 ppm
Inorganic Impurities - Chloride and Sulfate (as Sulfate)	NMT 20ppm	<20 ppm
Organic Impurities - Related Compounds	Individual Impurities NMT 0.1%	<0.1%
	Total Impurities NMT 1.0%	< 1.0%
Organic Impurities – Limit of Chlorinated Compounds	NMT 30ppm of Cl	<30 ppm
Organic Impurities - Fatty Acids and Esters	NMT 1mL of 0.5N NaOH is consumed	0.30 mL
Color	To Pass Test	Pass
Residue after Ignition	NMT 0.01%	<0.01%
Water	NMT 5.0%	0.04%

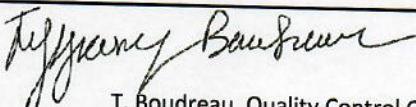
Certification and Compliance Statements

This lot of Glycerin complies with all of the current requirements listed in the United States Pharmacopeia monograph. Certain test data have been supplied by third parties.

No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Glycerin. does not contain residual solvents of class 1, 2 or 3 that would meet the criteria for those classifications listed in the current USP/NF General Chapter <467>.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by:  T. Boudreau, Quality Control Chemist Date: 04/16/20