

BRENNTAG MID-SOUTH

PURCHASE ORDER #:

816152 ✓

Material ID: REFINED GLYCERINE USP 99.7%

PICK UP #:

1025019564



Product Identified As: Refined Glycerin USP 99.7% Kosher

Vessel/ Voyage: MT Ginga Ocelot V1804
Lot Number: 315-261-18
Manufacturing Date: 07/13/2018
Expiry Date: 07/12/2020

TEST	SPECIFICATION	RESULT
Description	To Pass	Passes
Solubility	To Pass	Passes
Color (Color, Pt-Co)	To Pass (10 max)	Passes(4.4)
Identification (A) - IR	To Pass	Passes
Identification (B) - Limit of EG and DEG		
Diethylene Glycol, wt. %	0.10 max	<0.1
Ethylene Glycol, wt. %	0.10 max	<0.1
Identification (C) - Confirmation of Glycerin by GC	To Pass	Passes
Related Compounds	To Pass	Passes
Individual Impurities, wt%	0.1 max	<0.1
Total Impurities, wt%	1.0 max	<1.0
Specific Gravity @25/25°C	1.2612 min	1.2618
Residue on Ignition	5.0 mg/50 gm max	1.1 mg
Residue on Ignition, wt%	0.01 max	0.0021
Sulfuric Acid Heat Test, APHA	80 max	40
Water, wt. %	0.3 max	0.031
Chloride, ppm	< 10	Passes
Sulfate, ppm	< 20	Passes
Heavy Metals	< 5 µg/g (ppm)	Passes
Chlorinated Compounds, ppm	< 30	Passes
Assay, Anhydrous Basis, wt. %	99.0 - 101.0	99.98
Fatty Acids and Esters (mL of 0.5 N NaOH)	< 1 mL	Passes (0.2)
Residual Solvents	Compliant	Compliant
Fatty Acids & Esters, wt%	Report	0.008
Appearance	CFSM	Passes
Odor	Characteristic	Passes

Product tested in accordance with USP 40th Edition Monograph for Glycerin.

Quality Assurance Department

Shan Nathan
QA/QC Manager
208 401 0683

Report Date 09/18/2018

BMS # 20149018278001

IMPORTANT: All information provided is believed to be accurate and complete. The data provided is representative of the product quality on the date of analysis for the lot number indicated. This certificate of analysis may not include all of the constituents of the product. Persons using this information should make their own determination regarding its suitability for their particular application. This certificate of analysis shall not in any way limit or preclude the operation and effect of the applicable terms and conditions of sale.