



PRODUCT SPECIFICATIONS

Product Name: Refined Glycerin 99.7% Vegetable Grade

Product Code: TRG100V

Chemical Name: Glycerol

Meets USP-NF (US Pharmacopeia-National Formulary) and FCC (Food Chemical Codex) specifications

<u>Properties</u>	<u>Specifications</u>	<u>Methods</u>
Color	Pass (APHA equivalent 20 max)	USP/NF*
Identification A, IR	Passes test as glycerin	USP #197F
Identification B, Limit of DEG & EG	Pass	USP/NF*
Identification C, GC	Passes test as glycerin	USP/NF*
Specific Gravity (SG)	1.2613 @25/25°C min	USP #841
% Glycerin, by calculation from SpGrav	99.7 min	TRAM-108
Residue on Ignition (ROI)	0.01% max	USP #281
Water	0.3% max	USP #I-921
Chloride	Pass (10ppm or 0.001% max)	USP #221
Sulfate	Pass (20ppm or 0.002% max)	USP #221
Elemental Impurities	Meets Oral PDE Limits	USP #232 & 233
Limit of Chlorinated Comps.	PASS (30ppm or 0.003% max)	USP/NF*
Fatty Acids & Esters (FA & E)	not more than 1 mL of 0.5N NaOH consumed	USP/NF*
Related Compounds	not more than 0.1% any other individual impurity, And not more than 1.0% for total impurities	USP/NF*
Assay, anhydrous	99.0-101.0%	USP/NF*
Residual Solvents	Pass (meets requirements)	USP* <467>

* In compliance with the latest USP/NF supplement

CAS# 56-81-5

All data, including the formulations and procedures discussed herein are believed to be correct. However, this should not be accepted as a guarantee of their accuracy, and confirming tests should be run in your own plant or laboratory. No statement shall be construed as a recommendation for any use which would violate patent rights. Sales of all products are pursuant to terms and conditions included in Twin Rivers Technologies sales documents. Nothing contained herein shall constitute a guarantee or warranty with respect to the products described or their use. Safety information regarding this product is contained in its Safety Data Sheet (SDS). Consumers of this product are urged study and use the information contained on the SDS.