

PRODUCT SPECIFICATIONS

Product Name: Refined Glycerin 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, Ferric Chloride | Passes | USP/NF* |
| Identification A, IR | Passes as glycerin | USP #197F |
| Identification B, <i>Limit of DEG & EG</i> | Passes ($\leq 0.1\%$ of each DEG & EG) | USP/NF* |
| Identification C, GC | Passes glycerin | USP/NF* |
| Specific Gravity (SG) | 1.249 min @25/25°C | USP #841 |
| Residue on Ignition (ROI) | 0.01% max | USP #281 |
| Water | 0.3% max | USP #921 |
| Chloride | Passes (10ppm or 0.001% max) | USP #221 |
| Sulfate | Passes (20ppm or 0.002% max) | USP #221 |
| Elemental Impurities | Meets Oral PDE Limits | USP #232 & 233 |
| Limit of Chlorinated Compds. | Passes (30ppm or 0.003% max) | USP/NF* |
| Fatty Acids & Esters (FA & E) | 1 ml. max of 0.5N NaOH consumed | USP/NF* |
| Related Compounds | $\leq 0.1\%$ any other individual impurity and $\leq 1.0\%$ for total impurities | USP/NF* |
| Assay, anhydrous | 99.0 - 101.0% | USP/NF* |
| Residual Class 1 & 2 Solvents | Passes | USP* <467> |

* In compliance with the latest USP/NF supplement

CAS# 56-81-5

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