

PRODUCT SPECIFICATION SHEET GLYCERIN Meets USP/NF/FCC Monographs NATURAL, KOSHER

Main Catalog No: 349000FCC-Size Code*

*Refer to Master Price List – Individual package sizes have unique size codes

| PRODUCT SPECIFICATIONS | MONO GRAPH | LIMITS | TYPICAL ANALYSIS |
|--|---------------|---|------------------------|
| Assay on anhydrous basis | USP/FCC | 99.0-101.0% | 99.9% |
| Identification Test A | USP/FCC | Conforms to Infrared Spectra | Pass |
| Identification test B | USP FCC | Ethylene Glycol, NMT 0.1% Diethylene Glycol, NMT 0.1% Conforms to sample solution | <0.1% <0.1% Pass |
| Identification Test C | USP | Matches GC scan | Pass |
| Specific Gravity | USP FCC | NLT 1.249@25°C NLT 1.259 @25°C | 1.262 |
| Inorganic Impurities - Chloride and Sulfate (as Chloride) | USP | NMT 10ppm | <10 ppm |
| Inorganic Impurities - Chloride and Sulfate (as Sulfate) | USP | NMT 20ppm | <10 ppm |
| Inorganic Impurities - Lead | FCC | NMT 1 mg/kg | <1 mg/kg |
| Organic Impurities - Related Compounds | USP | Individual Impurities NMT 0.1% Total Impurities NMT 1.0% | Pass |
| Organic Impurities – Limit of Chlorinated Compounds Chlorinated Compounds (as Cl) | USP FCC | NMT 30ppm of Cl NMT 0.003% | <30 ppm <0.003% |
| Organic Impurities - Fatty Acids and Esters | USP/FCC | NMT 1mLof 0.5N NaOH is consumed | Pass |
| Color | USP/FCC | To Pass Test | Pass |
| Readily Carbonizable Substances | FCC | To Pass Test | Pass |
| Residue on Ignition | USP FCC | NMT 0.01% NMT 0.01% | <0.005% |
| Water | USP FCC | NMT 5.0% NMT 1.0% | 0.09% |

Hygroscopic

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.

Form: Glycerin, USP/FCC, Rev. 2.3, 05/19, PJM