



SALES SPECIFICATION

PRODUCT NAME: Propylene Glycol USP R Material

Description:

Color: Colorless

Odor: Practically odorless

Appearance: Liquid

| Test Description | Specification Limits | | Unit of Measure |
|---------------------------------|-----------------------------|----------------|------------------------|
| | Minimum | Maximum | |
| Acidity as acetic acid | | 0.005 | Wt % |
| Appearance | Pass | | |
| Assay | 99.5 | | Wt % |
| Chlorides | | 1 | ppm |
| Color | | 10 | Pt-Co |
| Distillation, IBP | 185 | | Deg C |
| Distillation, DP | | 189 | Deg C. |
| Heavy Metals as Pb | | 5.0 | ppm |
| Identification, matches IR scan | Pass | | |
| Iron | | 0.5 | ppm |
| Lead | | 1 | ppm (1) |
| Oxidizing Substance | Pass | | |
| Residue on Ignition | | 70 | ppm |
| Residual Solvents | Pass | | |
| Refractive Index @ 20° C | 1.4310 | 1.4340 | |
| Reducing Substance | Pass | | |
| Specific Gravity @ 25° C | 1.035 | 1.037 | |
| Sulfate | | 60 | ppm |
| Water | | 0.200 | Wt % |
| Ethylene glycol | | 0.10 | Wt % |
| Diethylene glycol | | 0.10 | Wt % |

(1) Agreed Specification limits –no results reported

This product meets the requirements for the Propylene Glycol current United States Pharmacopoeia (USP), European Pharmacopoeia (EP), and the Food Chemicals Codex (FCC).

PG R USP is OU Kosher certified. It is not OU-P certified (Passover)

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