Certificate of Analysis



160 Proof Ethanol Grain Neutral Spirits (GNS)

#2-668 Willow Park Rd.

Kelowna, BC, Canada, V1X5C4

Customer:

Location:

Customer PO #: Cust. Item #: LOT Number: 1710052025

Product Code: 160 Proof Ethanol

Manufactured Date: May 1 2025

Shipping Date: May 1 2025

Container ID: HAMMOND T-13

BOL Number:

Sales Order Number:
Country of Origin: US

| Property Measured | Specifications | | Testing | |
|-------------------------------------------|----------------|-------|------------------|----------|
| | Min | Max | Method | Analysis |
| Specific Gravity @ 15.56C/60F | | | | 0.13 |
| Clean, Neutral Odor | 8.5 | 10 | ASTM E1879 | Passes |
| Methanol, ppm | 0 | 5 | GC-FID | 0.00 |
| Ethyl Acetate, ppm | 0 | 5 | GC-FID | 0.00 |
| Sum of all other impurities, ppm | 0 | 10 | GC-FID | 0.7500 |
| Proof | 159.5 | | Calculation | 159.98 |
| Alcohol % (By Volume) | 79.5 | | USP-NF Monograph | 79.98 |
| Alcohol % (By Weight) | 79.5 | | USP-NF Monograph | 79.98 |
| Specific Gravity @ 15.56C/60F | | | USP-NF Monograph | |
| Specific Gravity @ 20C | | 0.845 | USP-NF Monograph | 0.843 |
| Color, as is, Pt-Co | 0 | 10 | ASTM D1209 | 0 |
| Nonvolatile Residue in 100 ml, mg | 0 | 2.5 | USP-NF Monograph | 0.3 |
| Acidity, ppm (As Acetic Acid) | 0 | 25 | ASTM D1613 | 9.000 |
| Clear Appearance, Free of Particles | | | Visual | Passes |
| UV Absorbance, water, @ 240 nm: .40 max | 0 | 0.4 | USP-NF Monograph | Passes |
| UV Absorbance, water, 250-260 nm: .30 max | 0 | 0.3 | USP-NF Monograph | Passes |
| UV Absorbance, water, 270-340 nm: .10 max | 0 | 0.1 | USP-NF Monograph | Passes |
| UV, against water, 235-340 nm: Smooth | | | USP-NF Monograph | Passes |
| Water % (By Weight) | 0 | 0.1 | ASTM E1879 | 0.05 |
| | | | | |

Expiration Date: retest one year after production.

Product meets FCC purity limits when

tested against monograph specifications.

Information in this document is believed to be accurate. No warranty, express or implied, is made and ClearSolv Solvents Inc/ClearSolv Solvents USA assumes no liability resulting from the use of this document/product. The user must determine the suitability of this information/product for their application.

Product meets FCC purity limits when tested against monograph specifications

Kris Jeffreys Quality Manager