



Certificate of Analysis

Ethanol, 200 Proof

CAS# 64-17-5/EC# 200-578-6

Meets USP Spec Monograph / FCC

Grain Derived Ethanol

Batch/lot: 12032024G

Manufacture date: 12/3/2024

Quality Parameter	Method	Limit	Result
Acidity; as Acetic Acid	USP	Max 30	pass
Acetaldehyde + Acetal; $\mu\text{L/L}$	USP	Max 10	5
Methanol; $\mu\text{L/L}$	USP	Max 200	0
Benzene; $\mu\text{L/L}$	USP	Max 1	0
Sum of All Other Impurities; $\mu\text{L/L}$	USP	Max 300	29
UV-Vis Absorbance at 240nm; Abs	USP <197U>	Max 0.4	0.05
UV-Vis Absorbance at 260nm; Abs	USP <197U>	Max 0.3	0
UV-Vis Absorbance at 340nm; Abs	USP <197U>	Max 0.1	0
Color of Solution	USP <630>	Colorless	Colorless
Clarity of Solution	USP	Clear	Clear
Non-Volatile Residue; mg/100mL	USP	Max 2.5	<2.5
Specific Gravity at 15.56C;	USP <841>	Max 0.7962	0.7939
Proof at 15.56C;	USP <841>	Report	199.96

Properties, where stated, are to be considered as representative of current batch and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, no guarantee, warranty, or representation is made, intended, or implied as to the correctness or sufficiency of any information, or as to the suitability of any chemical compounds for any particular use. Products may be toxic and require special precautions in handling. For the products listed, user should obtain detailed information on toxicity, together with proper shipping, handling, and storage procedures, and comply with all applicable safety and environmental standards. ***Data on this form has been supplied by the manufacturer.*** Midwest Renewable Energy expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. It is the responsibility of the Buyer to determine suitability, legality, and acceptable use based upon the intended use. Products are tested to meet the analytical requirements of the noted grade. The above stated values have been drawn directly from the manufacturer certificate of analysis. The values stated are not intended to replace nor supersede any representation of the original certificate of analysis for this product. A full and complete version of the original certificate of analysis for this product can be provided to the customer upon purchase and Buyer's acceptance of Midwest Renewable Energy' Terms and Conditions.