

# Certificate of Analysis

**Ethanol, Grain Derived, 200 Proof**

**Lot Number:** 6401006

**Product Number:** RSOE0013

**Date Packaged:** JAN 15, 2024

**Recommended Retest Date:** DEC 2026

## Contains

Ethyl Alcohol CAS No. 64-17-5 MW 46.07

Test	Specification	Result
Acidity (as Acetic Acid)	max 0.003	0.003 %
Alkalinity (as NH <sub>3</sub> )	max 3	3 mg/Kg
Assay	min 94.9 % (v/v)	94.9 % (v/v)
Fusel Oil	To Pass Test	Passed
IR Identification	To Pass Test	Passed
Ketones/Isopropanol	To Pass Test	Passed
Lead (Pb)	max 0.50 mg/Kg	0.50 mg/Kg
Methanol	< 200	< 200 ppm
Nonvolatile Residue	max 0.003 %	0.003 %
Organic Impurities (Other)	< 1000	< 1000 ppm
Organic Impurities (Sum)	< 5000	500 ppm
Solubility in Water	To Pass Test	Passed
Specific Gravity @ 15.56°C	max 0.8161	0.8161
Specific Gravity @ 25.0°C	max 0.8096	0.8096
Substances Darkened by Sulfuric Acid	To Pass Test	Passed
Substances Reducing Permanganate	To Pass Test	Passed

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
RSOE0013-55E	55 gal poly drum	36 months

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)



Paul Brandon (01/15/2024)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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