



CERTIFICATE OF ANALYSIS

Product Name Grade Catalog # Item # Batch # Date of Manufacture: Recommended Retest Date: Customer PO # Packaging Type	Reagent Ethanol 200 Proof Anhydrous Grain Ethanol Denatured with Methanol and Isopropanol Specially Denatured Alcohol SDA 3A with Isopropyl Alcohol ACS Grade 241HPLC20 100983 220921-B036063 09/20/2022 09/19/2025 P23816/2 Case Poly Fluor 4x1 Gal
--	--

TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
Packaging Site	Internal	Greenfield Global USA Inc. 58 Vale Road, Brookfield, CT 06804 or 1101 Isaac Shelby Drive, Shelbyville, KY 40065	Brookfield CT	N/A
Appearance	Internal	Clear, Free of Suspended Matter	Pass	N/A
Color (Pt-Co)	Internal	NMT 5	LT 5	N/A
Odor	Internal	Characteristic	Pass	N/A
Ethanol	ACS	89.5 – 91.5%	90.45	%
Fluorescence Background	ACS	To Pass Test	Pass	N/A
LC Suitability	ACS	To Pass Test	Pass	N/A
Residue After Evaporation	ACS	5ppm max.	LT 5 ppm	N/A
Specific Gravity	ACS	0.785 - 0.795 @ 25.0°C	0.787	N/A
UV Absorbance	ACS	NMT 1.00 at 205 nm	0.69	N/A
UV Absorbance	ACS	NMT 0.60 at 210 nm	0.36	N/A
UV Absorbance	ACS	NMT 0.30 at 220 nm	0.23	N/A
UV Absorbance	ACS	NMT 0.20 at 230 nm	0.09	N/A
UV Absorbance	ACS	NMT 0.05 at 250 nm	0.01	N/A



CERTIFICATE OF ANALYSIS

TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
UV Absorbance	ACS	NMT 0.01 at 270 nm	0.00	N/A
UV Absorbance	ACS	NMT 0.01 at 400 nm	0.00	N/A
Identification	ACS	To Pass Test	Pass	N/A
Isopropanol	ACS	4.5 – 5.5%	5.02	%
Methanol	ACS	4.0 – 5.0%	4.53	%
Substances Reducing KMnO4	ACS	To Pass Test	Pass	N/A
Refractive Index	ACS	1.3580-1.3610 @ 25°C	1.3588	N/A
SDA3A 200	ACS	94.0 – 96.0%	94.98	%
Specific Gravity	ACS	0.7902 - 0.7912 @ 20.0°C	0.7904	N/A
Solubility in Water	ACS	To Pass Test	Pass	N/A
Titration Acid	ACS	0.0003 meq/g	LT 0.0003 meq/g	N/A
Titration Base	ACS	0.0002 meq/g	LT 0.0002 meq/g	N/A
Water	ACS	0.10% max.	0.05	%

Certification and Compliance Statements

This product is for further commercial manufacturing, laboratory or research use. 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.

This lot of Reagent Alcohol 200 proof complies with the American Chemical Society monograph, all of the above mentioned specifications and the requirements of 27 CFR Part 20.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.



CERTIFICATE OF ANALYSIS

This document was electronically signed by Gabriella Scoca on 9/21/2022 7:17:37 PM to indicate Quality Assurance Approval and to release this batch.