



CERTIFICATE OF ANALYSIS

Product Name	Ethyl Alcohol 190 Proof Neutral Spirits Cane Organic 95% by volume
Grade	FCC Grade
Catalog #	111ORCANE190
Item #	100234
Batch #	211026-B004966
Date of Manufacture:	10/26/2021
Recommended Retest Date:	10/25/2024
Customer PO #	P170
Packaging Type	Drum Poly 55 Gal
Quantity for Delivery	2
Packaged by	Greenfield Global USA Inc, 1101 Isaac Shelby Drive, Shelbyville, KY 40065

TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
Assay (by specific gravity@25°C)	FCC	NLT 94.9%	95.01	%
Specific Gravity @ 15.56oC	FCC	Not more than 0.8161 @ 15.56°C	0.8158	N/A
Specific Gravity @ 25.0oC	FCC	Not more than 0.8096 @ 25.0°C	0.8092	N/A
Proof	27CFR 30.23	Lot Analysis	190.0	N/A
Acidity (as acetic acid)	FCC	NMT 0.5 mL of 0.02N sodium hydroxide is required to restore the pink color. (NMT 0.003%)	Pass	N/A
Alkalinity (as NH3)	FCC	NMT 0.2 mL of 0.02N sulfuric acid is required to restore the red color. (NMT 3 mg/kg)	Pass	N/A
Organic Impurities - Fusel Oil	FCC	No foreign odor is perceptible when the last traces of alcohol leave the paper.	Pass	N/A
Identification by Infrared Absorption	FCC	Conforms to IR Spectra	Pass	N/A
Organic Impurities - Ketones, Isopropyl Alcohol	FCC	No precipitate forms within 3 min.	Pass	N/A
Inorganic Impurities - Lead	FCC	NMT 0.5 mg/kg	LT 0.5 mg/kg	N/A



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TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
Organic Impurities - Methanol	FCC	200 ppm max.	20	ppm
Nonvolatile Residue	FCC	NMT 0.003%	0.001	%
Organic Impurities - Any other single impurity	FCC	1000 ppm max.	6	ppm
Solubility in Water	FCC	No haze or turbidity develops	Pass	N/A
Organic Impurities - Substances Darkened by Sulfuric Acid	FCC	The mixture is colorless or has no more color than either the acid or the sample before mixing.	Pass	N/A
Organic Impurities - Substances Reducing Permanganate	FCC	The pink color does not entirely disappear.	Pass	N/A
Organic Impurities - Sum of all impurities	FCC	5000 ppm max.	20	ppm

Certification and Compliance Statements

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

This product is for further commercial manufacturing, laboratory or research use. Appropriate/legal use of this product is the responsibility of the user.

This product is certified Organic by Oregon Tilth.

This product is certified compliant with USDA NOP, ACB/EU Equivalency, US/Canada Equivalency, USDA/MAFF Export regulations.

This product is GMO-Free and Gluten Free.

This lot of Ethyl Alcohol complies with all of the current requirements listed in the Food Chemical Codex monograph.

This product is non-GMO Project Verified and certified Kosher.

This document was electronically signed by Natalie Engelbrecht on 11/4/2021 11:20:48 AM to indicate Quality Assurance Approval and Release this document.

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