

**Ethyl Alcohol 95% (190 Proof)**

**Grain Derived**

**Grade:** FCC

**Catalog number:** 111FCC190

Test	Mono-graph	Specification	Typical Result
Identification by Infrared Absorption	FCC	Conforms to IR Spectra	Pass
Assay (by specific gravity@25°C)	FCC	NLT 94.9%	95.01 %
Proof	27CFR 30.23	Lot Analysis	190.0
Specific Gravity @ 15.56°C	FCC	Not more than 0.8161 @ 15.56°C	0.8158
Specific Gravity @ 25.0°C	FCC	Not more than 0.8096 @ 25.0°C	0.8092
Inorganic Impurities - Lead	FCC	NMT 0.5 mg/kg	LT 0.5 mg/kg
Organic Impurities - Fusel Oil	FCC	No foreign odor is perceptible when the last traces of alcohol leave the paper.	Pass
Organic Impurities - Ketones, Isopropyl Alcohol	FCC	No precipitate forms within 3 min.	Pass
Organic Impurities - Methanol	FCC	200 ppm max.	9 ppm
Organic Impurities - Any other single impurity	FCC	1000 ppm max.	0 ppm
Organic Impurities - Sum of all impurities	FCC	5000 ppm max.	9 ppm
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

Test	Mono-graph	Specification	Typical Result
Organic Impurities - Substances Reducing Permanganate	FCC	The pink color does not entirely disappear.	Pass
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
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
Nonvolatile Residue	FCC	NMT 0.003%	0.000 %
Solubility in Water	FCC	No haze or turbidity develops	Pass

### Certification and Compliance Statements

This product complies with all of the current requirements listed in the Food Chemical Codex.

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

Greenfield products are for further commercial manufacturing, laboratory use, or research. Greenfield is not registered with the United States Food and Drug Administration (FDA) as a drug manufacturing facility. Greenfield products are not registered with the FDA as active pharmaceutical ingredients in drug manufacturing.

Appropriate/legal use of all products are the responsibility of the user and subject to applicable local laws and regulations.