

PRODUCT SPECIFICATION SHEET ETHYL ALCOHOL 95% Meets ACS/USP GRADE Monographs Grain Derived Ethanol Catalog # / Product Code: 111000190-Size Code*

Available in the following sizes:

*Refer to Master Price List – Individual package sizes have unique size codes

TEST	MONOGRAPH	SPECIFICATION	TYPICAL RESULT
Assay	ACS USP	NLT 95.0% v/v 94.9-96.0% v/v	95.01%
Proof	27CFR 30.23	Lot Analysis	190.0
Solubility in Water	ACS	To Pass Test	Pass
Acetone/IPA	ACS	To Pass Test	Pass
Methanol	ACS	NMT 0.1%	< 0.001%
Substances Darkened by Sulfuric Acid	ACS	To Pass Test	Pass
Substances Reducing Permanganate	ACS	To Pass Test	Pass
Color (APHA)	ACS	NMT 10	< 10
Titrable Acid	ACS	NMT 0.0005 meq/g	<0.0003 meq/g
Titrable Base	ACS	NMT 0.0002 meq/g	<0.0001 meq/g
Acidity or Alkalinity	USP	The solution is pink (30ppm, expressed as acetic acid)	Pass
Identification Test A	USP	It meets the requirements of the test for Specific Gravity	Pass
Identification Test B	USP	Conforms to Infrared Spectra (Neat)	Pass
Specific Gravity @ 15.56°C	USP	0.812 - 0.816 @ 15.56°C	0.8158
Clarity of Solution	USP	Sample Solution A & B show the same clarity as that of water, or their opalescence is not more pronounced than that of Standard Suspension A	Pass
Color of Solution	USP	The Sample solution has the appearance of water or is not more intensely colored than the Standard solution	Pass
Ultraviolet absorption	USP	NMT 0.40 at 240 nm NMT 0.30 between 250 nm and 260 nm NMT 0.10 between 270 nm and 340 nm The spectrum shows a steadily descending curve with no observable peaks or shoulders	0.21 0.08 0.02 Pass
Limit of nonvolatile residue	USP	The weight of the residue does not exceed 2.5mg	<1.0mg
Nonvolatile Residue	ACS	NMT 0.001%	< 0.001%
Organic Impurities	USP	Methanol NMT 200 ppm Acetaldehyde and Acetal NMT 10 ppm Benzene NMT 2 ppm Sum of all other impurities NMT 300 ppm	<5 ppm <1 ppm <1 ppm <20 ppm

Form: Ethanol, Pure, 190, ACS/USP, #201, Rev. 2.9, 06/16, KAD

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. 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.