

PRODUCT SPECIFICATION SHEET
ETHYL ALCOHOL 95%
Meets ACS/USP - UV GRADE Monographs
Grain Derived Ethanol
Catalog # / Product Code: zp1110UV190DM55UV

TEST	MONOGRAPH	SPECIFICATION	TYPICAL RESULTS
Assay (by GC, corrected for water)	ACS	NLT 95.0%	95.01%
Assay (by specific gravity@15.56°C)	USP	94.9% - 96.0% (by volume)	95.01%
Proof	27CFR 30.23	Lot Analysis	190.0
Solubility in Water	ACS	To Pass Test	Pass
Acetone/Isopropyl Alcohol	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
Titration Acid	ACS	NMT 0.0005 meq/g	0.0003
Titration Base	ACS	NMT 0.0002 meq/g	0.0001
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	0.8156
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	Examine between 235nm – 340nm. 240nm 0.40 max. 250nm-260nm 0.30 max. 270nm-340nm 0.10 max. The spectrum shows a steadily descending curve with no observable peaks or shoulders	0.24 0.09 0.02 Pass
Ultraviolet absorption	ACS	210nm 0.40 max. 220nm 0.25 max. 230nm 0.15 max. 240nm 0.05 max. 270nm – 400nm 0.01 max.	0.36 0.21 0.11 0.04 0.00
Limit of nonvolatile residue	USP	The weight of the residue does not exceed 2.5mg	<1.0 mg
Residue after evaporation	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 <30 ppm

Form: Ethanol, Pure, 190, ACS/USP/UV, UV DRUM, Rev. 3.1, 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.