

**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 (Specific Gravity)	USP	It meets the requirements of the test for Specific Gravity	Pass	
Specific Gravity @ 15.56°C	USP	0.812 - 0.816 @ 15.56°C	0.8156	
Identification Test B (Infrared Spectroscopy)	USP	Conforms to Infrared Spectra (Neat)	Pass	
Identification Test C (Limit of Methanol)	USP	NMT 200 µL/L (200ppm) of Methanol	Pass	
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.	0.24
		250nm-260nm	0.30 max.	0.09
		270nm-340nm	0.10 max.	0.02
		The spectrum shows a steadily descending curve with no observable peaks or shoulders	Pass	
Ultraviolet absorption	ACS	210nm	0.40 max.	0.36
		220nm	0.25 max.	0.21
		230nm	0.15 max.	0.11
		240nm	0.05 max.	0.04
		270nm – 400nm	0.01 max.	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	<5 ppm
		Acetaldehyde and Acetal	NMT 10 ppm	<1 ppm
		Benzene	NMT 2 ppm	<1 ppm
		Sum of all other impurities	NMT 300 ppm	<30 ppm

Form: Ethanol, Pure, 190, ACS/USP/UV, UV DRUM, Rev. 3.2, 09/20, PJM

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.