## PRODUCT SPECIFICATION SHEET ETHYL ALCOHOL 200 PROOF, ABSOLUTE

## Meets ACS/USP GRADE Monographs

Current Catalog #: 111000200-Size Code\*
Alternative Catalog # 111USP200, 111ACS200-Size Code\*

This product meets or exceeds all specifications as set forth in the current ACS/USP monographs.

TEST	Monograph	SPECIFICATION	Typical Results
Assay (by GC, corrected for water)	ACS	NLT 99.5%	99.98%
Assay (by specific gravity@15.56°C)	USP	NLT 99.5%	99.99%
Water (wt%)	ACS	NMT 0.2%	0.02%
Proof	27CFR 30.23	Lot Analysis	200.0
Identification A	USP	Meets the requirements of the test for Specific Gravity	Pass
Identification B	USP	Conforms to Infrared Spectra (Neat)	Pass
Color (APHA)	ACS	NMT 10	<10
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
Solubility in Water	ACS	To Pass Test	Pass
Specific Gravity	USP	NMT 0.7962 at 15.56C	0.7938
Residue on Evaporation	ACS	NMT 0.001%	<0.001%
Limit of Nonvolatile Residue	USP	The weight of the residue does not exceed 2.5mg	<1.0 mg
Acetone/Isopropyl Alcohol	ACS	To Pass Tests	Pass
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
Methanol	ACS	NMT 0.1%	<0.1%
Substances Darkened by Sulfuric Acid	ACS	To Pass Test	Pass
Substances Reducing Permanganate	ACS	To Pass Test	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	0.29 0.11 0.02 Pass
Organic Impurities	USP	Methanol NMT 200ppm Acetaldehyde and Acetal NMT 10ppm Benzene NMT 2ppm Sum of all other impurities NMT 300ppm	<5 ppm None Detected None Detected <10 ppm

Form: Ethanol, Pure, 200, ACS/USP, #101, Rev 4.8, 06/16, KAD