

## PRODUCT SPECIFICATION SHEET ETHYL ALCOHOL 200 PROOF, ABSOLUTE

## Meets HPLC-UV Monographs

Grain Derived Ethanol Current Catalog #: 111HPLC200- Size Code\* Available in the following sizes:

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

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

Mono			
TEST	graph	SPECIFICATION	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 Test A	USP	It meets the requirements of the test for Specific Gravity	Pass
Identification Test B	USP	Conforms to Infrared Spectra	Pass
Specific Gravity	USP	NMT 0.7962 at 15.56C	0.7938
Color (APHA)	ACS	NMT 10	<10
Clarity of Solution	USP	Sample Solution A & B show 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
Residue on Evaporation	ACS	NMT 0.001%	<0.001%
Limit of Nonvolatile Residue	USP	The weight of the residue does not exceed 2.5mg	<1.0mg
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 Absorbance	USP	Examine between 235nm – 340nm.240nm0.40 max.250nm-260nm0.30 max.270nm-340nm0.10 max.The spectrum shows a steadily descending curve with no observable peaks or shoulders	0.29 0.11 0.02 Pass
Ultraviolet Absorbance	ACS* / Internal	220nm         0.30 max.           230nm         0.18 max.           240nm         0.08 max.           270nm - 400nm         0.01 max.	0.17 0.09 0.03 0.00
*Ultra Violet Absorbance purged of O <sub>2</sub>	ACS	To Pass Test	Pass
Gradient Elution	ACS	To Pass Test	Pass
Gradient Analysis @ 254nm	ACS	To Pass Test	Pass
Organic Impurities	USP	Methanol200 ppmAcetaldehyde and Acetal10ppm maxBenzene2ppm max.Sum of all other impurities300ppm max.	<pre>&lt;5 ppm None Detected None Detected &lt;10 ppm</pre>

Form: Ethanol, Pure, 200, HPLC, Rev 5.0, 06/16, KAD

Disclaimer: For Industrial/Lab use only. Not intended as a Drug Substance, Medical Device or Disinfectant. Appropriate/legal use of this product is the responsibility of the user. (Rev. # disclaimer only, rev 3.6, 07/15, PD)