

**PRODUCT SPECIFICATION SHEET**  
**REAGENT ALCOHOL (Denatured 200 Proof)**  
**General Use HPLC Grade, UV Reagent ACS**

Main Catalog #: 241000200 Alt. Catalog #: 241HPLC200

Composition: 95 parts by volume SDA 3A and 5 parts by volume IPA.

Available in the following sizes:

24x1 pint Poly Pints, 4x1 gallon High Den. Poly Bottles, 4x4 liter 4 Liter Amber Glass, 5 gallon Poly w/Rieke Spout, 5 gallon Metal w/Rieke Spout, 5 gallon Cube w/spigot, 5 gallon Shelf Sitter w/spigot, 55 gallon New Poly Drum, 55 gallon New Lined Metal-Black

Test	Specification	Typical Result
Assay (by GC)(v/v)	89.5 – 91.5% Ethanol 4.0 – 5.0% Methanol 4.5 – 5.5% IPA	90.27% 4.74% 4.99%
Assay: Specially Denatured Alcohol Formula 3A (200 proof)(v/v)	94.0 – 96.0%	95.01%
Isopropyl Alcohol (2-Propanol)(v/v)	4.0 – 6.0%	4.99%
Water, max.	0.1%	0.04%
Residue After Evaporation	Max. 5 ppm	<5 ppm
Appearance	Clear, Passes Test	Clear
Specific Gravity @ 20°C	0.7902 - 0.7912	0.7904
Specific Gravity @ 25°/25°C	0.785 – 0.795	0.7870
Color, Pt-Co (APHA)	Max. 5	< 5
Odor	Pass	Pass
Titration Acid	Max. 0.0003 meq/g	< 0.0003 meq/g
Titration Base	Max. 0.0002 meq/g	< 0.0002 meq/g
Fluorescence	Pass	Pass
Identification	Pass	Pass
Substances Reducing KMnO <sub>4</sub>	Pass	Pass
Solubility In Water	Pass	Pass
Refractive Index @ 25C	1.3580-1.3610	Pass
Ultraviolet Absorbance (1.00-cm cell vs. water)(curve smooth throughout stated range with no extraneous impurity peaks)		Pass
UV @ 205nm	Max. 1.00	0.87
UV @ 210nm	Max. 0.60	0.50
UV @ 220nm	Max. 0.30	0.27
UV @ 230nm	Max. 0.20	0.14
UV @ 250nm	Max. 0.05	0.02
UV @ 270nm	Max. 0.01	0.01
UV @ 400nm	Max. 0.01	0.00
LC Suitability	To Pass	Pass

Form: Reagent Alcohol, 200, HPLC, #201, Revision 4.2, 11/05, DTH

Shipping Name:  
 Alcohol, n.o.s.  
 Hazard Class: 3 UN 1987  
 PG: II  
 ETHANOL CAS NO. 64-17-5  
 ISOPROPANOL CAS NO.67-63-0  
 METHANOL CAS NO.67-56-1  
 DSP-CT-18

LOT NO:  
 0712345-RE200  
 BATCH NO:  
 07123-09  
 SERIAL NO:  
 XX001234

 THE POWER OF THREE<sup>3</sup>  
**PHARMCO-AAPER**  
 AND COMMERCIAL ALCOHOLS



**REAGENT ALCOHOL (200 PROOF)**  
**GENERAL USE HPLC-UV**  
**REAGENT GRADE ACS**

Main Cat. No:  
 241000200

Alt. Cat. No: 241ACS200 241LWR200

4 x 4 LITER

Fill Date: MONTH DAY, YEAR      Expiration Date: MONTH, YEAR  
 Reagent Alcohol, Specially Denatured Alcohol Formula 3A-95 parts per vol., and  
 Isopropyl Alcohol-5 parts per vol.

Formula (Denatured 3A)	200 Proof	Percent by Volume:	
SDA 3A (Ethanol-Methanol)	94.0-96.0% parts by volume	Ethanol	89.5-91.5%
IPA	4.0-6.0% parts by volume	Methanol	4.0-5.0%
		IPA	4.5-5.5%

Product Specifications	Limits	Typical
Water, max	0.1%	<0.1%
Residue after Evaporation, max	5 ppm Max	< 5 ppm
Appearance	Clear	Clear
Specific Gravity@ 20C	0.7902-0.7912	Pass
Specific Gravity@25/25C	0.785-0.795	Pass
Odor	5 Max	< 5
Color (Pt-Co)	Pass	Pass
Titration Acid	0.0003 meq/g	0.0001 meq/g
Titration Base	0.0002 meq/g	0.00005 meq/g
Fluorescence Background	To Pass	Pass
Identification	To Pass	Pass
Substances Reducing KMnO <sub>4</sub>	To Pass	Pass
Solubility in Water	To Pass	Pass
Refractive Index @ 25 C	1.3580-1.3610	Pass

UV Absorbance(1.00-cm cell vs water) @  
 (curve smooth throughout stated range with no extraneous impurity peaks)

205 nm	1.00	1.00
210 nm	0.60	0.513
220 nm	0.30	0.278
230 nm	0.20	0.025
250 nm	0.05	0.000
270 nm	0.01	0.000
400 nm	0.01	0.000
LC Suitability	Pass	Pass



241HPLC200



Danger, Poison,  
 Vapor Harmful

**SHIP TO:**  
 COMPANY  
 P.O. # 123456789  
 STREET  
 CITY, STATE ZIP CODE

DANGER: FLAMMABLE LIQUID & VAPOR. Keep away from all sources of ignition. Improper Exposure Can Result in Injury or Death! Wear all recommended protective equipment. Refer to MSDS for additional information.\*

DANGER: THIS PRODUCT CONTAINS METHYL ALCOHOL (Methanol) May be fatal or cause blindness if swallowed! Cannot be made non-poisonous. Refer to MSDS for additional information.\*

STORAGE AND HANDLING: Keep in a cool, dry place. Do not expose to direct sunlight. Use only with proper personal protective equipment and ventilation. Refer to MSDS for additional information.\*

FIRST AID: SEEK IMMEDIATE MEDICAL ATTENTION. REFER TO MSDS FOR APPROPRIATE FIRST AID FOR THIS CHEMICAL.\*

REFER TO MSDS PRIOR TO USE. Use Only Under Appropriate Conditions. Use Only Under Trained Supervision.\*

FOR INDUSTRY/PHARMA/LAB USE ONLY. Not intended as an active substance in Food or Drug. Not to be considered a Med. Device. Not intended for use as a Disinfectant as defined by the EPA.\*

ANTIDOTE: Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

**pharmco**  
 PRODUCTS INC.  
 ABSOLUTE PURITY

**AAPER**  
 ABSOLUTE VALUE

58 Vale Road, Brookfield, CT 06804 1101 Isaac Shelby Drive, Shelbyville, KY 40065  
 P: 800-243-6360 F: 203-740-3481 P: 800-456-1017 F: 502-633-0685

www.pharmco-aaper.com

An ISO 9001:2000  
 Certified Company

DENATURED ETHANOL • PURE ETHANOL • HIGH PURITY SOLVENTS