



SERALCO - USP 99.9% PREMIUM GRADE ETHANOL USP Grade. ISO

Certificate of Analysis

Laboratory use Only

This product conforms to the current BP EP, USP Monographs.

Batch No:

Manufacturing Date:

Expiry Date:

Retest Date:

Monograph Name: Ethanol BP/EP, USP

Tested By: In house Qc lab and external laboratories for specific test as per EP/BP+USP Monograph Conforms.

Note:

Non-Monograph Use: The suitability of this reference standard for use in non-compendial applications is solely the responsibility of the user

For use with compendial tests.

Remarks:

This is to certify that the above-mentioned batch has been analyzed at the time of quality release and has been found to be complying with the label declaration/prescribed specification.


Quality & Technical
QUALITY CONTROL



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TEST	UNIT	SPECIFICATION	RESULT
1) Characters i) Appearance	N/A	Colourless , clear, volatile flammable liquid, hygroscopic	Colourless, clear, volatile flammable liquid, hygroscopic
ii) Solubility	N/A	Miscible with water and with methylene chloride. It burns with a blue smokeless flame	Miscible with water and with methylene chloride. It burns with a blue smokeless flame
2) Boiling Point	°C	About 78°C	78.2°C
3) Identification a) Relative Density	N/A	0.790 to 0.793	0.792
b) Infrared absorption	N/A	The sample spectrum is concordant with spectrum obtained with Dehydrated Alcohol Standard	The sample spectrum is concordant with spectrum obtained with Dehydrated Alcohol Standard
4) Appearance	N/A	It is clear and colourless After standing for 5 min, the dilution remains clear when compared with water	It is clear and colourless After standing for 5 min, the dilution remains clear when compared with water
5) Acidity or Alkalinity	N/A	The solution is pink	The solution is pink
6) Relative Density	N/A	0.790 to 0.793	0.792
7) Absorbance		Maximum 0.40 at 240 nm 0.30 between 250 nm and 260 nm, and 0.10 between 270 nm and 340 nm	
i) At 240nm	N/A		0.0888
ii) Between 250 nm and 260 nm	N/A		0.0354

iii) Between 270 nm and 340 nm	N/A		0.0248
		The spectrum shows a steadily descending curve with no observable peaks or shoulders	The spectrum shows a steadily descending curve with no observable peaks or shoulders
8) Residual Evaporation	ppm m/V	Maximum 25 ppm m/V	25
9) Assay	% v/v % m/m	Not less than 99.5% v/v of C ₂ H ₆ O (99.2% m/m), at 20°C	99.7% v/v of C ₂ H ₆ O (99.2% m/m), at 20°C
10) Identification A Specific Gravity	N/A	Not more than 0.7962 at 15.56°	0.7892 at 15.56°
11) B-Infrared Absorption	N/A	The sample spectrum is concordant with the spectrum obtained with Dehydrated Alcohol Standard	The sample spectrum is concordant with the spectrum obtained with Dehydrated Alcohol Standard
12) Limit of Non- Volatile Residue	mg	The weight of the residue is not more than 2.5mg	The residue weighs 0.5mg
13) Specific Gravity	N/A	Not more than 0.7962 at 15.56°	0.7892 at 15.56°
14) Ultraviolet Absorption		Not more than 0.40 at 240 nm, between 250 nm and 260 nm, Not more than 0.10 between 270 and 340 nm	
i)At 240nm	N/A		0.0888
ii) Between 250 nm and 260 nm	N/A		0.0354
iii) Between 270 nm and 340 nm	N/A		0.0248

Curve		The spectrum shows a steadily descending curve with no observable peaks or shoulders	The spectrum shows a steadily descending curve with no observable peaks or shoulders
15) Clarity of solution	N/A	Sample solution A and sample solution B shows same clarity as that of water or their opalescence is not more pronounced than that of Standard suspension A	Sample solution A and sample solution B shows same clarity as that of water
16) Acidity or Alkalinity	N/A	The solution is pink (30µg/g)	The solution is pink
17) Colour of solution	N/A	The sample solution has the appearance of water or is not more intensely colored than the Standard solution	The sample solution has the appearance of water
18) Assay	N/A	It contains not less than 99.2% by weight, corresponding to not less than 99.5% by volume at 15.6° of ethanol (C ₂ H ₅ O)	100.0% by weight corresponding to 100.0% by volume at 15.6° of ethanol

Result: The material complies with the above standard specification.

The above data do not relieve the user from analyzing the product upon receipt. Any legally binding assurance regarding the suitability of the product for any particular purpose or use can not be derived there of. This certificate shall not be reproduced except in full, without written consent of the Gemini Associates.