COMMERCIAL ALCOHOLS
by Greenfield Global

Quality Department - Certificate of Analysis

ETHYL ALCOHOL ANHYDROUS USP EP BP JP	**Lot # :**	**Item #:**	**Location shipped from :**
	036203	P210EAAN	Brampton, ON

Measure Description	Method Description	Specification	Results
Density (in air), Kg/L, at 20°C	Methods specified in the Revenue Canada Customs & Excise Alcoholometric Tables	NMT 0.7885	0.78834
Ethyl Alcohol Content, v/v%	Methods specified in the Revenue Canada Customs & Excise Alcoholometric Tables	NLT 99.5	99.96
IDENTIFICATION A - Specific Gravity at 15.56°C	Current USP	NMT 0.7962	0.7938
Specific Gravity (in vacuo), at 15/15°C	Current JP	0.79422 to 0.79679	0.79442
IDENTIFICATION A - Relative Density at 20°C	Current EP BP	0.790 to 0.793	0.7909
IDENTIFICATION B - Infrared Absorption	Current USP	Conforms to standard	Conforms
Acidity or Alkalinity	Current USP	1mL of 0.01N NaOH in 20mL sample produces pink colour	Meets test requirements
Nonvolatile Residue, g/100mL	Current USP	NMT 0.0025	0.0000
Clarity of Solution	Current USP	Sample Solution A and Sample Solution B show the same clarity as that of water or their opalescence is not more pronounced than that of Standard Suspension A	Meets test requirements
Colour of Solution	Current USP	The Sample Solution has the appearance of water or is not more intensely coloured than the Standard Solution	Meets test requirements
UV Absorbance - Spectrometer at 240nm	Current USP	NMT 0.40	0.286
UV Absorbance - Spectrometer at 250nm	Current USP	NMT 0.30	0.131
UV Absorbance - Spectrometer at 260nm	Current USP	NMT 0.30	0.063
UV Absorbance - Spectrometer at 270nm	Current USP	NMT 0.10	0.038
UV Absorbance - Spectrometer at 340nm	Current USP	NMT 0.10	0.016
UV Absorbance - Smoothness of UV Curve	Measured in a 5cm cell from 235nm to 340nm	The spectrum shows a steadily descending curve with no observable peaks or shoulders	Conforms
GC - Acetaldehyde + Acetal, ppm (µL/L)	GC Analysis	NMT 10	0.5
GC - Methanol, ppm (µL/L)	GC Analysis	NMT 75	0.0
Identification Test C (Limit of Methanol)	Current USP	NMT 200µL/L (200ppm) of methanol	Conforms
GC - Benzene, ppm (µL/L)	GC Analysis	NMT 2	0.0
GC - Sum of All Impurities, ppm (µL/L)	GC Analysis	NMT 300	5.4
Water Content, v/v%	Karl Fischer Titration	NMT 0.100	0.008

QC Test #:	QT0045034	**Manufacturing Date:**	**29-Mar-2023**	**Disposition:**	**Released(X) Rejected ( )**
CofA Revision #:	0	**Certified Date:**	**29-Mar-2023**	**Quality Approver:**	SOPHIA.KHAN
		Expiry Date:	**Mar-2025**		
Specification:	QCSPEC #: QSPEC000037, Version #: QV0000003, Approver: KS, Effective Date: 29-Mar-2021				