

1 Gallon V1001 KOPTEC, 1 Gallon TYPICAL CERTIFICATE OF ANALYSIS ETHYL ALCOHOL USP/Multicompendial 200 PROOF

Lot# Manufactured:

Recommended Retest date is three years from the date of manufacture

Parameter	Monograph	<u>UofM</u>	Specifications	Result
Assay – ethyl alcohol	USP/BP/EP/JP	$V/V^{0/0}$	≥ 99.9	100.0
Specific gravity @ 15.56°C	USP	N/A	< 0.7962	0.7941
Specific gravity @ 15°C	JP	N/A	< 0.797	0.794
Relative Density@ 20.0°C	BP/EP/	N/A	0.790 - 0.793	0.791
Identification Test A	USP Test	N/A	Specific Gravity	Pass
Identification Test A	BP/EP	N/A	Relative Density	Pass
Identification Test B	USP/BP/EP	N/A	Conforms to IR Spectra	Pass
Identification Test B (1)	JP	N/A	Conforms to IR Spectra	Pass
Identification Test C	BP/EP	N/A	Colorimetric Test	Pass
Identification Test D	BP/EP	N/A	Precipitation Test	Pass
Color	USP/JP	N/A	Color of water	Pass
Clarity	USP	N/A	Clear	Pass
Clarity	JP	N/A	Clear	Pass
Water	USP	v/v%	\leq 0.1	0.0
Appearance	BP/EP	N/A	Clear, Colorless	Pass
Non volatile residue	USP/BP/EP/JP	ppm	≤ 25	0.0
Volatile Impurities				
Sum of Acetal & Acetaldehyde	USP/BP/EP	ppm	≤ 10	5
Benzene	USP/BP/EP	ppm	<u></u>	0.0
Methanol	USP/BP/EP	ppm	= 2 ≤ 100	0.0
Summary of secondary peaks	USP/BP/EP	ppm	< 300	0.3
For Volatile impurities	JP		s the requirement of test	Pass
Acidity (or alkalinity)	USP/BP/EP	ppm	< 30 as acetic acid	Pass
Acidity or alkali	JP	N/A	Colorimetric Test	Pass
UV absorbance @ 240 nm	USP/BP/EP/JP	A	≤0.40	< 0.40
UV absorbance @ 250-260 nm	USP/BP/EP/JP	A	≤0.30	< 0.30
UV absorbance @ 270-340 nm	USP/BP/EP/JP	A	_0.10 ≤0.10	< 0.10
UV absorbance @ 235-340 nm	USP/BP/EP/JP	N/A	The Spectrum shows a steadily	
2 . assorbance 2 255 5 10 mm	C.S.1 / D.1 / D.1 / 0.1	11/11	descending curve with no	
			observable Peaks or shoulders	Dogg
			observable reaks of shoulders	rass

Reviewed By Date:

Charlotte Veloski

Manager, Quality and Technical Services COA Template revised 12/01/2015

Charlotte V Dodei

BSE/TSE Statement: There are no materials of animal origin in the raw materials or in the process aides used to manufacture any DLI products.