

Material No.: 9830-02 Batch No.: 0000229441

Manufactured Date: 2019/04/02 Expiration Date: 2021/04/01

Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay (CH3OH) (by GC, corrected for water)	>= 99.9 %	100.0
Appearance	Passes Test	PT
Gradient Elution Test (a.u.) – 254 nm	<= 0.01	< 0.01
Fluorescence Trace Impurities, measured as Quinine Base – at 450 nm Emission	<= 0.30 ppb	< 0.10
Fluorescence Trace Impurities, measured as Quinine Base – at Emission Maximum for Impurities	<= 1.0 ppb	0.3
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	< 0.1
Water (H₂O)	<= 500 ppm	< 500
LC/MS Suitability – Largest Response on ESI– Positive Mode (as Reserpine)	<= 50 ppb	< 50
Trace Impurities - Aluminum (Al)	<= 50 ppb	< 5
Trace Impurities – * Calcium (Ca)	<= 50 ppb	11
Trace Impurities – Iron (Fe)	<= 50 ppb	< 1
Trace Impurities – Lithium (Li)	<= 30 ppb	< 1
Trace Impurities – Magnesium (Mg)	<= 50 ppb	< 1
Trace Impurities – Nickel (Ni)	<= 30 ppb	< 5
Frace Impurities – Potassium (K)	<= 50 ppb	< 10
Trace Impurities – * Sodium (Na)	<= 50 ppb	< 5

For Laboratory, Research or Manufacturing Use

Filtered through a 0.2 micron filter.

^{*} May change over time due to extraction from glass container.

Material No.: 9830-02 Batch No.: 0000229441

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

