



Material No.: 9830-02  
Batch No.: 0000200257  
Manufactured Date: 2018/04/25  
Expiration Date: 2020/04/24  
Revision No: 1

## Certificate of Analysis

| Test                                                                                         | Specification | Result |
|----------------------------------------------------------------------------------------------|---------------|--------|
| Assay (CH <sub>3</sub> OH) (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    | 0.5    |
| Color (APHA)                                                                                 | <= 10         | 5      |
| Residue after Evaporation                                                                    | <= 1.0 ppm    | 0.4    |
| Water (H <sub>2</sub> O)                                                                     | <= 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     | 4      |
| 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    |
| Trace Impurities – Potassium (K)                                                             | <= 50 ppb     | < 10   |
| Trace Impurities – * Sodium (Na)                                                             | <= 50 ppb     | < 5    |

For Laboratory, Research or Manufacturing Use

\* May change over time due to extraction from glass container.

Filtered through a 0.2 micron filter.

Country of Origin: US  
Packaging Site: Phillipsburg Mfg Ctr & DC



Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000  
Paris, KY 9001:2008  
Mexico City, Mexico 9001:2008  
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003  
Gliwice, Poland 9001:2008, 13485:2012  
Selangor, Malaysia 9001:2008  
Dehradun, India, 9001:2008, 14001:2004, 13485:2003  
Mumbai, India, 9001:2008  
Panoli, India 9001:2008



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