

## CERTIFICATE OF ANALYSIS

Version 2.0

Revision Date: 04/14/2016

### PRODUCT IDENTIFICATION

**Product identifiers**

Product Name : Inulin USP  
 Catalog Number : I-1000  
 Current Lot : **14051601**

| USP Test                           | Procedure        | Specification   | Result           | Pass/Fail |
|------------------------------------|------------------|---|------------------|-----------|
| Completeness of Solution           | Inulin Monograph | Solution must be clear  | Clear            | Pass      |
| Specific Rotation                  | USP <781S>       | between -32.0 and -40.0   | -35.5            | Pass      |
| Microbial Enumeration Tests        | USP <61>         | The total aerobic microbial count is less than 1000 per g.  | ≤ 100 cfu/g      | Pass      |
| Tests for Specified Microorganisms | USP <62>         | Absence of Salmonella species and Escherichia coli and for absence of Staphylococcus aureus and Pseudomonas aeruginosa. | Absent           | Pass      |
| Loss on Drying                     | USP <731>        | ≤ 10%   | 3.1%             | Pass      |
| pH                                 | USP <791>        | 4.5 – 7.0   | 5.3              | Pass      |
| Chloride                           | USP <221>        | ≤0.014%   | ≤0.014%          | Pass      |
| Iron                               | Inulin Monograph | Conforms to Test  | Conforms to Test | Pass      |
| Reducing Sugars                    | Inulin Monograph | Conforms to Test  | Conforms to Test | Pass      |
| Calcium                            | Inulin Monograph | ≤ 0.10%   | ≤ 0.10%          | Pass      |
| Sulfate                            | USP <221>        | ≤ 0.05%   | ≤ 0.05%          | Pass      |
| Heavy Metals                       | USP <231>        | ≤ 5 ppm   | ≤ 5ppm           | Pass      |
| Residue on Ignition                | USP <281>        | ≤(% of Ca found X 3.4)1.05  | 0.07%            | Pass      |
| Free Fructose                      | Inulin Monograph | ≤ 2%  | 1.1%             | Pass      |
| Content of combined glucose        | Inulin Monograph | ≥2% ≤5%   | 3.5%             | Pass      |
| Assay for Inulin                   | Inulin Monograph | ≥94% ≤102%  | 100.4%           | Pass      |