

Certificate of Analysis

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Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
 Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

| | | | |
|-------------------|---|-----------------------------|------------|
| Catalog Number | A61 | Quality Test / Release Date | 12/02/2019 |
| Lot Number | 195663 | | |
| Description | L-ASCORBIC ACID, A.C.S. | | |
| Country of Origin | China | Suggested Retest Date | Nov/2024 |
| Chemical Origin | Organic - non animal | | |
| BSE/TSE Comment | No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product. This product has been tested and certified to be free of BSE-TSE. | | |

| N/A | | | |
|--------------------------|------------------|---------------------------------|--------------|
| Result Name | Units | Specifications | Test Value |
| APPEARANCE | | REPORT | WHITE POWDER |
| ASSAY | % | >= 99.0 | 99.8 |
| HEAVY METALS (as Pb) | % | <= 0.002 | <0.002 |
| IDENTIFICATION | PASS/FAIL | = PASS TEST | PASS TEST |
| IGNITION RESIDUE | % | <= 0.1 | 0.01 |
| IRON (Fe) | % | <= 0.001 | <0.001 |
| SPECIFIC ROTATION @ 25 C | DEGREES (+ OR -) | Inclusive Between +20.5 - +21.5 | 21.2 |



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
 If there are any questions with this certificate, please call at (800) 227-6701.
 *Based on suggested storage condition.