

Thermo Fisher Scientific Ward Hill, MA-Sites

 30 Bond Street
 220 Neck Road
 38 Shelley Road

 Ward Hill
 Ward Hill
 Ward Hill

 MA 01835
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## **CERTIFICATE OF ANALYSIS**

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.

Certificate Number. 951001163

Catalogue Number 036664
Lot Number T08L006

Description Citric acid, anhydrous, ACS, 99.5+%

CAS Number 77-92-9
Quality Test/Release Date 08/Jul/2025
Suggested retest date 08/Jul/2030
Country of Origin United States

Result Name	Units	Specifications	Test Value
Assay (Titration)	%	≥99.5%	100.1
Chloride content	%	≤0.001%	<0.001
Appearance (Color)		White	White
Form		Solid	Solid
Residue on ignition	%	≤0.02%	0.004
Impurity content	ppm	Fe: ≤3ppm	1
Impurity content	%	Oxalate (C <sub>2</sub> O <sub>4</sub> ): P.T. (limit about 0.05%)	<0.05
Impurity content	ppm	Pb:≤2ppm	1
Impurity content	%	Phosphate (PO₄): ≤0.001%	<0.001
Impurity content		Substances carbonizable by hot sulfuric acid (tartrates etc.): P.T.	Passes Test
Impurity content	%	Sulfur compounds (as SO₄): ≤0.002%	<0.002
Insoluble material	%	≤0.005%	0.001

John Astarita

John Astarita Director, Quality

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.