

## 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 P24D006  
Description Citric acid, anhydrous, ACS, 99.5+ %  
CAS Number 77-92-9  
Quality Test/Release Date 06/May/2025  
Suggested retest date 06/May/2030  
Country of Origin United States

Result Name	Units	Specifications	Test Value
Assay (Titration)	%	≥99.5%	100.0
Chloride content	%	≤0.001%	<0.001
Appearance (Color)		White	White
Form		Solid	Solid
Residue on ignition	%	≤0.02%	0.008
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 (PO <sub>4</sub> ): ≤0.001%	<0.001
Impurity content		Substances carbonizable by hot sulfuric acid (tartrates etc.): P.T.	Passes Test
Impurity content	%	Sulfur compounds (as SO <sub>4</sub> ): ≤0.002%	<0.002
Insoluble material	%	≤0.005%	0.001



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.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.