

## 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	036665
Lot Number	W03G050
Description	Citric acid monohydrate, ACS, 99.0-102.0%
CAS Number	5949-29-1
Quality Test/Release Date	23/Apr/2026
Suggested retest date	23/Apr/2031
Country of Origin	Austria
Declaration of Origin	Other
BSE/TSE	Origin is not animal. Not directly derived from/manufactured with any animal byproducts in any way (including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Assay (Aqueous acid-base Titration)	%	99.0-102.0 %	100.0
Appearance (Color)		Colorless or white	Colorless
Form		Solid	Solid
Residue on ignition	%	≤0.02%	0.003
Impurity content	%	Sulfate (SO4): ≤0.002%	0.0003
Impurity content		Substances carbonizable by hot sulfuric acid: Passes test	Passes test
Impurity content	%	Phosphate (PO4): ≤0.001%	0.0002
Impurity content		Oxalate (C2O4): Passes test	Passes test
Impurity content	ppm	Lead ( Pb): ≤2 ppm	<2
Impurity content	ppm	Iron (Fe): ≤3 ppm	<3
Impurity content	%	Chloride ( Cl): ≤0.001%	0.0002
Insoluble material	%	≤0.005%	0.002



Derek Roy  
 Quality Manager, LCD

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.