Thermo Fisher Scientific
Ward Hill, MA-Sites
30 Bond Street
Ward Hill
MA 01835

220 Neck Road
Ward Hill
MA 01835

38 Shelley Road
Ward Hill
MA 01835

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	033258
Lot Number	X22M007
Description	Hydrofluoric acid, ACS, 48-51%
CAS Number	7664-39-3
Quality Test/Release Date	23/Oct/2026
Suggested retest date	23/Oct/2029
Country of Origin	United States

Result Name	Units	Specifications	Test Value
Assay	%	48.0-51.0% HF	49.0
Appearance (Color)		Clear	Clear
Form		Liquid	Liquid
Residue on ignition	ppm	≤5ppm	<1
Impurity content	ppm	Arsenic (As): ≤0.05ppm	<0.001
Impurity content	ppm	Chloride (Cl): ≤ 5ppm	0.03
Impurity content	ppm	Copper (Cu): ≤ 0.1ppm	<0.001
Impurity content	%	Fluosilicic acid (H2SiF6): ≤0.01%	0.0002
Impurity content	ppm	Iron (Fe): ≤1ppm	<0.001
Impurity content	ppm	Phosphate (PO4): ≤1ppm	<0.05
Impurity content	ppm	Sulfate and sulfite (as SO4): ≤5ppm	0.1
Heavy Metals (as Pb)	ppm	≤0.5ppm	<0.01



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.