



CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate

Number. 2317548

Catalogue Number 27048
Lot Number A0454050

Description Formic acid,99%,for analysis

CAS Number 64-18-6
Quality Test/Release Date 15/Dec/2024
Suggested retest date 15/Dec/2027
Country of Origin GERMANY
Declaration of Origin synthetic

Result Name	Units	Specifications	Test Value
Appearance (Form)		Clear liquid	Clear liquid
Color scale	APHA	=<10	10
Infrared spectrum		Conforms	Conforms
Titration with NaOH	%	>=98.5	99.5
Dilution test		passes test	passes test
Residue after evaporation	%	=<0.005	0.003
Refractive index		1.3700 to 1.3720 (20°C, 589 nm)	1.3718 (20°C, 589 nm)
Chloride (CI)	ppm	=<5	=<5
Sulfate (SO4)	ppm	=<50	=<50
Sulfite (SO3)	ppm	=<20	=<20
Cadmium (Cd)	ppm	=<0.1	=<0.1
Copper (Cu)	ppm	=<0.1	=<0.1
Iron (Fe)	ppm	=<2	=<2
Lead (Pb)	ppm	=<0.1	=<0.1

Geert Torfs Supervisor, QC

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.