

Certificate of Analysis

1 Reagent Lane	
Fair Lawn, NJ 07410	
201.796.7100 tel	Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
201.796.1329 fax	Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A118	Quality Test / Release Date	10/26/2020
Lot Number	201709		
Description	FORMIC ACID, 88%, CERTIFIED ACS		
Country of Origin	United States	Suggested Retest Date	Oct/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A					
Result Name	Units	Specifications	Test Value		
APPEARANCE		REPORT	Clear colorless liquid		
ACETIC ACID	%	<= 0.4	<0.4		
AMMONIUM	%	<= 0.005	<0.005		
ASSAY	%	>= 88.0	90.3		
CHLORIDE	%	<= 0.001	<0.001		
COLOR	APHA	<= 15	<15		
DILUTION TEST	PASS/FAIL	= PASS TEST	PASS TEST		
EVAPORATION RESIDUE	%	<= 0.002	0.001		
HEAVY METALS (as Pb)	ppm	<= 5	<5		
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST		
IRON (Fe)	ppm	<= 5	<5		
SULFATE (SO4)	%	<= 0.002	<0.002		
SULFITE	PASS/FAIL	= PASS TEST	PASS TEST		

Julian Buston

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above. If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.