

Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System 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	LS121	Quality Test / Release Date	05/14/2021
Lot Number	206323		
Description	ACETONITRILE WITH 0.1% (V/V) TRIFLUOROACETIC ACID (TFA), OPTIMA-LCMS GRADE		
Country of Origin	United States	Suggested Retest Date	May/2026
Chemical Origin	Organic - non animal		

N/A				
Result Name	Units	Specifications	Test Value	
APPEARANCE		REPORT	clear, colorless liquid	
ASSAY (V/V) TRIFLUOROACETIC ACID	%	Inclusive Between 0.095 - 0.105	0.100	
COLOR	APHA	<= 10	<10	
EVAPORATION RESIDUE	ppm	<= 1	<1	
HPLC - UV GRADIENT SUITABILITY PDA (200 - 400 nm)	mAU	<= 2	<2	
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST	
IONIC IMPURITY - ALUMINUM (AI)	ppb	<= 30	<1	
IONIC IMPURITY - CALCIUM (Ca)	ppb	<= 50	5	
IONIC IMPURITY - COPPER (Cu)	ppb	<= 10	<1	
IONIC IMPURITY - IRON (Fe)	ppb	<= 25	2	
IONIC IMPURITY - LEAD (Pb)	ppb	<= 10	<1	
IONIC IMPURITY - MAGNESIUM (Mg)	ppb	<= 30	<1	
IONIC IMPURITY - MANGANESE (Mn)	ppb	<= 10	<1	
IONIC IMPURITY - NICKEL (Ni)	ppb	<= 10	<1	
IONIC IMPURITY - POTASSIUM (K)	ppb	<= 50	6	
IONIC IMPURITY - SILVER (Ag)	ppb	<= 10	<1	
IONIC IMPURITY - SODIUM (Na)	ppb	<= 50	12	
IONIC IMPURITY - ZINC (Zn)	ppb	<= 20	1	
LC-MS GRADIENT SUITABILITY	ppb	<= 50	<50	
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.6	0.4	
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.55	0.36	
OPTICAL ABS AT 230 NM	ABS. UNITS	<= 0.4	0.3	
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.03	0.03	
WATER (H2O)	%	<= 0.01	<0.01	

^{*}Based on suggested storage condition.



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Julian Burton - Quality Control Manager - Fair Lawn

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