

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-05-26 12:23:51  
 Date of Next Testing: 2024-05-25 12:23:51  
 Product Name: **Trifluoroacetic acid**  
 CAS Number: 76-05-1  
 Specifications & Purity: for LC-MS, ≥99.5%  
 Lot #: E23161050  
 SKU #: **T103297**  
**Analysis:** **217376**  
 Storage Temperature: Argon charged, Desiccated

Parameter	Limit Values	Result
UV Absorbance 290nm	0-0.04	0.01
Barium(Ba)	0-0.05 (ppm)	0.00 ppm
Copper(Cu)	0-0.02 (ppm)	0.00 ppm
Cadmium(Cd)	0-0.05 (ppm)	0.00 ppm
Water by Karl Fischer	0-0.05 (%)	0.01 %
UV Absorbance 270nm	0-0.1	0.07
Purity(GC)	99.5-100 (%)	99.99 %
UV Absorbance 260nm	0-0.9	0.87
Nickel(Ni)	0-0.05 (ppm)	0.02 ppm
Potassium(K)	0-0.1 (ppm)	0.06 ppm
Cobalt(Co)	0-0.02 (ppm)	0.01 ppm
UV Absorbance 320nm	0-0.025	0.01
Titanium(Ti)	0-0.05 (ppm)	0.02 ppm
Molybdenum(Mo)	0-0.02 (ppm)	0.01 ppm
UV Absorbance 300nm	0-0.03	0.02
Lithium(Li)	0-0.02 (ppm)	0.00 ppm
Chromium(Cr)	0-0.05 (ppm)	0.02 ppm
Magnesium(Mg)	0-0.5 (ppm)	0.01 ppm
Sodium(Na)	0-0.5 (ppm)	0.03 ppm
(Pb)Lead	0-0.1 (ppm)	0.00 ppm
Manganese(Mn)	0-0.05 (ppm)	0.04 ppm
UV Absorbance 280nm	0-0.05	0.01
Aluminum(Al)	0-0.05 (ppm)	0.03 ppm
Iron(Fe)	0-0.3 (ppm)	0.04 ppm
Strontium(Sr)	0-0.02 (ppm)	0.01 ppm
Calcium(Ca)	0-0.2 (ppm)	0.17 ppm

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Parameter	Limit Values	Result
LC-MS Test	Pass	Pass
$\lambda$ , H <sub>2</sub> O reference	Pass	Pass
Appearance (T103297)	Colorless Liquid	Colorless liquid

A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager