

## Certificate of Analysis

Date of Testing: 2023-11-29 11:01:30  
Date of Next Testing: 2025-11-28 11:01:30  
Product Name: **Trifluoroacetic acid (TFA)**  
CAS Number: 76-05-1  
Specifications & Purity: Analytical Reagent,99.0%  
Lot #: K2323178  
SKU #: **T103291**  
Version: **4**  
Analysis #: **251666**  
Storage Temperature: Argon charged,Desiccated

| Parameter                           | Limit Values          | Result                |
|-------------------------------------|-----------------------|-----------------------|
| Purity (Titration by NaOH)          | 98.5-101.5 (%)        | 100.32 %              |
| Density (20°C)                      | 1.491-1.495           | 1.49                  |
| Water by Karl Fischer               | 0-0.1 (%)             | 0.06 %                |
| Refractive index n <sub>20</sub> /D | 1.283-1.3             | 1.28                  |
| PH                                  | 1-3                   | 1.00                  |
| Appearance (T103291)                | Colorless Liquid      | Colorless liquid      |
| Infrared spectrum                   | Conforms to Structure | Conforms to Structure |



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QA & QC Manager