

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-09-13 17:05:52  
 Date of Next Testing: 2024-09-02 17:05:52  
 Product Name: (R)-(-)- $\alpha$ -Methoxy- $\alpha$ -(trifluoromethyl)phenylacetyl chloride  
 CAS Number: 39637-99-5  
 Specifications & Purity:  $\geq 99\%$   
 Lot #: I2207169  
 SKU #: M113468  
 Version: 1  
 Analysis #: 126744  
 Storage Temperature: Store at -20°C, Argon charged

| Parameter                           | Limit Values                     | Result                           |
|-------------------------------------|----------------------------------|----------------------------------|
| Purity(GC)                          | 99-100 (%)                       | 99.90000 %                       |
| Density (20°C)                      | 1.354-1.357                      | 1.35600                          |
| Optical Rotation(c=1,in chloroform) | -133~-128 (°)                    | -128.00000 °                     |
| Refractive index n <sub>20</sub> /D | 1.468-1.471                      | 1.46900                          |
| Appearance (M113468)                | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Infrared spectrum                   | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager