

Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2023-11-14 13:10:24  
Date of Next Testing: 2027-11-13 13:10:24  
Product Name: **Ethyl thiophene-3-carboxylate**  
CAS Number: 5751-80-4  
Specifications & Purity: 98%  
Lot #: K2308117  
SKU #: **E123056**  
Analysis: **285578**

| Parameter                           | Limit Values                     | Result                           |
|-------------------------------------|----------------------------------|----------------------------------|
| Purity(GC)                          | 98-100 (%)                       | 98.52400 %                       |
| Refractive index n <sub>20</sub> /D | 1.522-1.523                      | 1.52210                          |
| Appearance (E123056)                | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Proton NMR spectrum                 | Conforms to Structure            | Conforms to Structure            |
| Infrared spectrum                   | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager