

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-07-13 16:37:20  
Date of Next Testing: 2025-07-02 16:37:20  
Product Name: **Ethyl 2-bromothiazole-5-carboxylate**  
CAS Number: 41731-83-3  
Specifications & Purity: 98%  
Lot #: G2307618  
SKU #: **E119080**  
**Analysis:** **073399**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Refractive index n <sub>20</sub> /D	1.552-1.556	1.55
Density (20°C)	1.607-1.613	1.61
Purity(Titration by AgNO <sub>3</sub> )	96.5-103.5 (%)	99.32 %
Purity(HPLC)	98-100 (%)	98.79900 %
Appearance (E119080)	Yellow to amber liquid	Yellow to amber liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager