

## Certificate of Analysis

Date of Testing: 2023-05-11 09:18:48  
Date of Next Testing: 2027-05-10 09:18:48  
Product Name: **L-Valine t-butyl ester hydrochloride**  
CAS Number: 13518-40-6  
Specifications & Purity: 99%  
Lot #: E2308611  
SKU #: **V117015**  
Analysis: **056056**

| Parameter   | Limit Values          | Result                |
|---|-----------------------|-----------------------|
| Specific Rotation [α] <sub>20</sub> /D(c=2 in H <sub>2</sub> O) | 3.4-5.4 (°)           | 3.40°                 |
| Purity(HPLC)  | 99-100 (%)            | 99.16000 %            |
| Infrared spectrum   | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager