

## Certificate of Analysis

Date of Testing: 2023-03-08 17:03:05

Date of Next Testing: 2027-03-07 17:03:05

Product Name: **D- $\alpha$ -Hydroxyisovaleric acid**

CAS Number: 17407-56-6

Specifications & Purity: 98.0% (T)

Lot #: E1920136

SKU #: **S167911**

**Analysis:** **195879**

Storage Temperature: Argon charged

| Parameter                                                  | Limit Values                         | Result                               |
|------------------------------------------------------------|--------------------------------------|--------------------------------------|
| Purity (Titration by NaOH)                                 | 97.5-102.5 (%)                       | 98.01 %                              |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in CHCL}_3)$ | -19--12 (°)                          | -15.30 °                             |
| Appearance (S167911)                                       | White to Off-White Powder or Crytals | White to Off-White Powder or Crytals |
| Proton NMR spectrum                                        | Conforms to Structure                | Conforms to Structure                |

A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager