

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-07-28 17:46:18  
Date of Next Testing: 2026-07-27 17:46:18  
Product Name: **Ethyl acetoacetate-1,2,3,4-<sup>13</sup>C<sub>4</sub>**  
CAS Number: 84508-55-4  
Specifications & Purity: 99 atom% <sup>13</sup>C, 98% (CP)  
Lot #: G2315695  
SKU #: **E474098**  
**Analysis:** **243082**  
Storage Temperature: Protected from light, Argon charged

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	100.00 %
<sup>13</sup> C Enrichment	99-100 (%)	99.10000 %
Water by Karl Fischer	0-0.5 (%)	0.40 %
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure
<sup>13</sup> C NMR Spectrum	Conforms to Structure	Conforms to Structure
Appearance(E474098)	Clear Colorless Liquid	Clear Colorless Liquid



John Su  
QA & QC Manager