

## Certificate of Analysis

Date of Testing: 2024-02-06 10:09:59  
Date of Next Testing: 2026-02-05 10:09:59  
Product Name: **2,3-Butanedione**  
CAS Number: 431-03-8  
Specifications & Purity: Standard for GC, ≥99%(GC)  
Lot #: E2207120  
SKU #: **B104602**  
Version: **0**  
Analysis #: **320266**

Parameter	Limit Values	Result
Purity(GC)	99-100 (%)	99.02 %
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager