

Certificate of Analysis

Date of Testing: 2024-07-16 10:08:54
Date of Next Testing: 2026-07-16 10:08:54
Product Name: **Ethyl 4-Chlorobutyrate**
CAS Number: 3153-36-4
Specifications & Purity: $\geq 98.0\%$ (GC)
Lot #: J22111024
SKU #: **E135072**
Version: **1**
Analysis #: **388324**

| Parameter | Limit Values | Result |
|-------------------------------------|-------------------------------------|-------------------------------------|
| Refractive index n ₂₀ /D | 1.43-1.432 | 1.43 |
| Density (20°C) | 1.076-1.08 | 1.08 |
| Purity(GC) | 98-100 (%) | 98.02 % |
| Appearance (E135072) | colorless to yellow to brown liquid | colorless to yellow to brown liquid |
| Proton NMR spectrum | Conforms to structure | Conforms to Structure |



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QA & QC Manager