

## Certificate of Analysis

Date of Testing: 2023-09-20 09:20:54  
Date of Next Testing: 2025-09-19 09:20:54  
Product Name: **4-Chlorobutyric Acid**  
CAS Number: 627-00-9  
Specifications & Purity: 95%  
Lot #: 12311356  
SKU #: **C134513**  
Analysis: **270254**

Parameter	Limit Values	Result
Purity(Neutralization titration)	95-100 (%)	98.54%
Density (20°C)	1.22-1.227	1.22
Purity(GC)	95-100 (%)	96.21%
Refractive index n <sub>20</sub> /D	1.449-1.452	1.45
Appearance (C134513)	colorless to brown liquid	colorless to brown liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager