

## Certificate of Analysis

Date of Testing: 2022-07-22 23:19:53  
Date of Next Testing: 2026-07-21 23:19:53  
Product Name: **1-Chlorobutane**  
CAS Number: 109-69-3  
Specifications & Purity: 98%  
Lot #: G2220430  
SKU #: **C103253**  
**Analysis:** **116953**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Refractive index n <sub>20</sub> /D	1.401-1.403	1.40
Density (20°C)	0.887-0.889	0.89
Purity(GC)	98-100 (%)	99.85 %
Appearance (C103253)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager