

## Certificate of Analysis

Date of Testing: 2022-10-24 11:49:03  
Date of Next Testing: 2026-10-23 11:49:03  
Product Name: **(S)-(+)-3-Chloro-1,2-propanediol**  
CAS Number: 60827-45-4  
Specifications & Purity: 97%  
Lot #: A1909053  
SKU #: **C106059**  
Analysis: **147685**

Parameter	Limit Values	Result
Refractive index n <sub>20</sub> /D	1.478-1.482	1.48
Enantiometric Excess	97-100 (%)	97.05 %
Specific Rotation [α] <sub>20</sub> /D(c=2 in H <sub>2</sub> O)	7.5-10.5 (°)	7.50 °
Purity(GC)	97-100 (%)	99.63 %
Density (25°C)	1.321-1.324	1.32
Appearance (C106059)	Colorless to Yellow Liquid	Colorless to Yellow Liquid
Proton NMR spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager