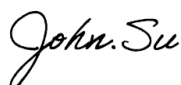


## Certificate of Analysis

Date of Testing: 2023-04-18 18:27:44  
Date of Next Testing: 2027-04-17 18:27:44  
Product Name: **Isopropyl Alcohol**  
CAS Number: 67-63-0  
Specifications & Purity: Pharmaceutical grade  
Lot #: D23061697  
SKU #: **I434894**  
**Analysis:** **203302**  
Storage Temperature: Argon charged,Desiccated

Parameter	Limit Values	Result
Specific gravity 25 °C	0.783-0.787	0.78500
Refractive index n <sub>20</sub> /D	1.376-1.378	1.38
Assay(GC)	≥ 99.0 (%)	99.83500 %
Residue on Evaporation	≤0.0005 (%)	0.00 %
Diethyl Ether	≤ 0.1(%)	0.00000 %
Acetone	≤ 0.1 (%)	0.00000 %
Diisopropyl Ether	≤ 0.1 (%)	0.00000 %
N-Propanol	≤0.1 (%)	0.00000 %
2-Butanol	≤0.1 (%)	0.00000 %
methanol	≤0.02 (%)	0.00000 %
Unspecified Impurity	≤0.1 (%)	0.00000 %
Water by Karl Fischer	≤0.5 (%)	0.01 %
Total Impurities	≤1.0 (%)	0.00000 %
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager