

## Certificate of Analysis

Date of Testing: 2023-03-08 01:34:43  
 Date of Next Testing: 2027-03-07 01:34:43  
 Product Name: **n-Butanol**  
 CAS Number: 71-36-3  
 Specifications & Purity: for HPLC,  $\geq 99.7\%$ (GC)  
 Lot #: C2301673  
 SKU #: **B111575**  
**Analysis:** **190060**  
 Storage Temperature: Argon charged, Desiccated

Parameter	Limit Values	Result
UV Absorbance 220nm	0-0.7	0.21
Refractive index n <sub>20</sub> /D	1.398-1.4	1.40
UV Absorbance 280nm	0-0.01	0.01
UV Absorbance 225nm	0-0.5	0.15
Purity(GC)	99.7-100 (%)	99.77%
Evaporation Residue	0-2 (mg/L)	0.00 mg/L
UV Absorbance 235nm	0-0.1	0.06
free acid (as C <sub>3</sub> H <sub>7</sub> COOH)	0-0.002 (%)	0.00%
UV Absorbance 400nm	0-0.01	0.00
Water by Karl Fischer	0-0.1 (%)	0.01%
UV Absorbance 240nm	0-0.1	0.03
UV Absorbance 260nm	0-0.04	0.00
UV Absorbance 210nm	0-1	0.44
Appearance (B111575)	Colorless liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



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ALADDIN SCIENTIFIC CORPORATION

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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager