

## Certificate of Analysis

Date of Testing: 2023-01-31 10:32:59  
Date of Next Testing: 2025-01-20 10:32:59  
Product Name: **Polyvinylpyrrolidone**  
CAS Number: 9003-39-8  
Specifications & Purity: average Mw 10000,K13-18  
Lot #: A2312291  
SKU #: **P110611**  
**Analysis: 172888**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Water by Karl Fischer	0-5 (%)	3.50 %
PH (5%, water) 25 ° C	3-7	4.40
Nitrogen by Elemental Analysis	11.5-12.8 (%)	12.10 %
K value	13-18	16.80
Appearance (P110611)	White to Off-White Powder	White to Off-White Powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H2O , Clear,Very Faint Yellow to Yellow,Clear,100 mg/mL	pass	Pass



John Su  
QA & QC Manager