

## Certificate of Analysis

Date of Testing: 2023-05-13 16:23:27  
Date of Next Testing: 2026-05-12 16:23:27  
Product Name: **Polyvinylpyrrolidone**  
CAS Number: 9003-39-8  
Specifications & Purity: suitable for plant cell culture, average mol wt 10,000  
Lot #: E2308848  
SKU #: **P434444**  
Version: **1**  
Analysis #: **206972**

Parameter	Limit Values	Result
pH(5% solution)	3-7	4.74000
Nitrogen by Elemental Analysis	11.5-12.8 (%)	11.81%
K-Value	13-19	15.60000
Appearance(P434444)	White to Off White Powder	White to Off White Powder
Solubility(100 mg/mL,H <sub>2</sub> O)Clear,Faint Yellow to Light Yellow	pass	Pass
Plant cell culture test	pass	Pass
Infrared spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager