

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-05 17:25:53  
Date of Next Testing: 2026-06-04 17:25:53  
Product Name: **Polyvinylpyrrolidone**  
CAS Number: 9003-39-8  
Specifications & Purity: powder, average Mw~55,000  
Lot #: E2331164  
SKU #: **P434442**  
Analysis: **172893**

Parameter	Limit Values	Result
K value	27-32	27.82
PH (5%, water) 25 ° C	3-5	3.54
Water by Karl Fischer	0-5 (%)	4.14 %
Heavy metals	0-10 (ppm)	0.00 ppm
Nitrogen by Elemental Analysis	11.5-12.8 (%)	11.86 %
Peroxide(as H <sub>2</sub> O <sub>2</sub> )	0-400 (ppm)	60.80 ppm
Formic Acid	0-0.5 (%)	0.30 %
2-pyrrolidone	0-2 (%)	1.30 %
Aldehydes	0-0.05 (%)	0.00 %
Appearance(P434442)	White to yellowish-white hygroscopic powder or flakes	White to yellowish-white hygroscopic powder or flakes
Infrared spectrum	conforms to structure	Conforms to Structure



John Su  
QA & QC Manager