

## Certificate of Analysis

Date of Testing: 2024-04-11 11:46:38  
Date of Next Testing: 2028-04-10 11:46:38  
Product Name: **Polyquaternium - 11**  
CAS Number: 53633-54-8  
Specifications & Purity: 20 wt. % in H2O  
Lot #: D2403440  
SKU #: **P101212**  
Analysis: **332102**

Parameter	Limit Values	Result
PH at 25°C(5% in water)	5.5-8.5	5.76
Solid Content	19-21 (%)	20.21 %
Miscellaneous Assay(Vinylpyrrolidone)	0-1 (%)	0.00000 %
Viscosity(25 °C,neat)	20000-60000 (cP)	24840.00 cP
Appearance (P101212)	Colorless Viscous Liquid , May be Hazy	Colorless Viscous Liquid , May be Hazy
Biological Stain Test	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager