

### Certificate of Analysis

<b>Product Information</b>			
Product Name	Polyglutamic Acid ( $\gamma$ -PGA)		
CAS No.	25513-46-6	Report Number	PAP20220348
Batch Number	PAP220323	Manufacture Date	2022/03/23
Batch Quantity	200Kg	Expiry Date	2024/03/22
<b>Test Items</b>			
Test Items	Test Standard		Test Result
Appearance	White to Off-white Powder		Conforms
Assay (Polyglutamic Acid)	$\geq 92.0\%$		92.80%
Molecular Weight	$\geq 1,000$ kDa		1,100kDa
pH Value	5~7.5		6.5
Transmittance (5g/L,AQ,400)	$> 95\%$		96.10%
Loss on Drying	$\leq 8.0\%$		5.32%
Heavy Metal	$< 20.0$ mg/kg		Conforms
Total Aerobic Count	$\leq 1000$ cfu/g		200cfu/g
E-Coli	Negative		Conforms
Salmonella	Negative		Conforms
Staphylococcus Aureus	Negative		Conforms
<b>Conclusion</b>			
Conclusion	To be complied with in-house Specification		
Shelf Life	2 years when properly stored.		
Storage	Store in cool & dry place, not freeze. Keep away from strong light.		

Tested by: 张丽娜

Checker: 李明

Approved:

