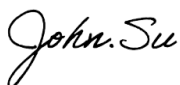


## Certificate of Analysis

Date of Testing: 2024-06-06 19:14:29  
Date of Next Testing: 2028-06-05 19:14:29  
Product Name: **Tween 80**  
CAS Number: 9005-65-6  
Specifications & Purity: pharmaceutical  
Lot #: F2404185  
SKU #: **T104866**  
Version: **2**  
Analysis #: **356688**  
Storage Temperature: Protected from light

Parameter	Limit Values	Result
Water by Karl Fischer	0-3 (%)	2.68 %
Acid Value	0-2.2 (mg/g)	0.60 mg/g
Heavy metal (as Pb)	0-0.001 (%)	0.00 %
viscosity	350-550 (mm <sup>2</sup> /s)	432.40 mm <sup>2</sup> /s
Hydroxyl value	65-80 (mgKOH/g)	71.50 mgKOH/g
Saponification value	45-55 (mgKOH/g)	45.60 mgKOH/g
Iodine value (I <sub>2</sub> /100g)	18-24	21.00
PH	5-8	7.00
Density (20°C)	1.06-1.09 (g/ml)	1.08 g/ml
Ignition Residue (as sulfate)	0-0.2 (%)	0.20 %
Color	pass	Pass
Freezing test	pass	Pass
Identification	pass	Pass



John Su  
QA & QC Manager