

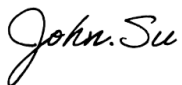
ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-06-05 15:51:42  
Date of Next Testing: 2030-06-04 15:51:42  
Product Name: **TWEEN @ 20**  
CAS Number: 9005-64-5  
Specifications & Purity: viscous liquid  
Lot #: F2601178  
SKU #: **T104863**  
Version: **1**  
Analysis #: **700299**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	0-3 (%)	2.33280 %
Acid Value	0-2.2 (mg/g)	1.11000 mg/g
Density (25°C)	1.08-1.12	1.10200
Residual Ethylene	0-1 (ppm)	1.00000 ppm
Viscosity(25 °C,neat)	275-480 (cP)	470.00000 cP
Hydroxy Value	96-108 (mgKOH/g)	96.20000 mgKOH/g
Dioxane Content	0-10 (ppm)	8.00000 ppm
Saponification value	40-50 (mg/g)	40.20000 mg/g
Appearance (T104863)	Yellow oily liquid	Yellow oily liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager