

Certificate of Analysis

Date of Testing: 2021-12-29 10:49:02
Date of Next Testing: 2025-12-28 10:49:02
Product Name: **TWEEN® 20**
CAS Number: 9005-64-5
Specifications & Purity: viscous liquid
Lot #: L2121579
SKU #: **T104863**
Analysis: **057109**
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	0-3 (%)	2.48 %
Acid Value	0-2.2 (mg/g)	0.60 mg/g
Residual Ethylene	0-1 (ppm)	0.24 ppm
Viscosity(25 °C,neat)	275-480 (cP)	368.50 cP
Hydroxy Value	96-108 (mgKOH/g)	102.00 mgKOH/g
Dioxane Content	0-10 (ppm)	3.64 ppm
Saponification value	40-50 (mg/g)	41.30 mg/g
Density (25°C)	1.08-1.12	1.10
Appearance (T104863)	Yellow oily liquid	Yellow oily liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager