

Certificate of Analysis

Date of Testing: 2023-02-18 10:45:27
Date of Next Testing: 2027-02-17 10:45:27
Product Name: **TWEEN® 20**
CAS Number: 9005-64-5
Specifications & Purity: viscous liquid
Lot #: B2314668
SKU #: **T104863**
Analysis: **185074**
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	0-3 (%)	2.49 %
Acid Value	0-2.2 (mg/g)	1.60 mg/g
Residual Ethylene	0-1 (ppm)	0.20 ppm
Hydroxy Value	96-108 (mgKOH/g)	100.30 mgKOH/g
Dioxane Content	0-10 (ppm)	1.00 ppm
Saponification value	40-50 (mg/g)	41.80 mg/g
Viscosity(25 °C, neat)	275-480 (cP)	280.00 cP
Density (25°C)	1.08-1.12	1.09
Appearance (T104863)	Yellow oily liquid	Yellow oily liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager