

Shanghai Aladdin Biochemical Technology Co., LTD  
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## Certificate of Analysis

Date of Testing: 2026-04-23 15:43:40  
Date of Next Testing: 2030-04-22 15:43:40  
Product Name: **TWEEN® 20**  
CAS Number: 9005-64-5  
Specifications & Purity: viscous liquid  
Lot #: D2616163  
SKU #: **T104863**  
Version: **1**  
Analysis #: **674276**  
Storage Temperature: Room temperature

| Parameter              | Limit Values          | Result                |
|------------------------|-----------------------|-----------------------|
| Water by Karl Fischer  | 0-3 (%)               | 2.48460 %             |
| Acid Value             | 0-2.2 (mg/g)          | 0.97000 mg/g          |
| Viscosity(25 °C, neat) | 275-480 (cP)          | 351.60000 cP          |
| Density (25°C)         | 1.08-1.12             | 1.10420               |
| Residual Ethylene      | 0-1 (ppm)             | 0.20000 ppm           |
| Hydroxy Value          | 96-108 (mgKOH/g)      | 98.10000 mgKOH/g      |
| Dioxane Content        | 0-10 (ppm)            | 1.00000 ppm           |
| Saponification value   | 40-50 (mg/g)          | 40.10000 mg/g         |
| Appearance (T104863)   | Yellow oily liquid    | Yellow oily liquid    |
| Infrared spectrum      | Conforms to Structure | Conforms to Structure |

