

## Certificate of Analysis

Date of Testing: 2023-05-23 14:17:09

Date of Next Testing: 2027-05-22 14:17:09

Product Name: **Tween™ 60**

CAS Number: 9005-67-8

Specifications &amp; Purity: nonionic detergent

Lot #: E23061223

SKU #: **T112750****Analysis: 226908**

| Parameter   | Limit Values  | Result  |
|---|---|---|
| Water by Karl Fischer   | 0-3 (%)   | 2.40 %  |
| Saponification value  | 45-55 (mgKOH/g)                                       | 49.82 mgKOH/g   |
| loss on Ignition  | 0-0.25 (%)  | 0.10 %  |
| Palmitic Acid   | ≥35 (%)   | 36.50 %   |
| Acid Value  | 0-2 (mgKOH/g)   | 0.92 mgKOH/g  |
| Hydroxy Value   | 81-96 (mgKOH/g)                                       | 95.98 mgKOH/g   |
| Stearic acid  | ≥47 (%)   | 47.80 %   |
| Appearance (T112750)  | White to Yellow, Yellow-Green<br>Liquid or Semi-solid | White to Yellow, Yellow-Green<br>Liquid or Semi-solid |
| Solubility in H <sub>2</sub> O , Colorless to Yellow-Green, Clear to Hazy, 100mg/ml | pass  | Pass  |

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