



## Certificate of Analysis

### Tween 20 NF FCC

**Catalog Number:** TW1001  
**CAS Number:** 9005-64-5  
**Synonym(s):** Polysorbate 20, Polyethylene glycol sorbitan monolaurate  
**Storage:** 15°C – 30°C  
**Retest Date:** Two years after date of manufacture.

Test	Specification
Description	Yellow liquid
Assay (Oxyethylene Content)	70.0 to 74.0%
Assay (Fatty Acid Composition)	
C6, Caproic	≤ 1.0%
C8, Caprylic	≤ 10.0%
C10, Capric	≤ 10.0%
C12, Lauric	40.0 – 60.0%
C14, Myristic	14.0 – 25.0%
C16, Palmitic	7.0 – 15.0%
C18, Stearic	≤ 11.0%
C18.1, Oleic	≤ 11.0%
C18.2, Linoleic	≤ 3.0%
Identification	
A: IR	To meet requirements
B: Composition of Fatty Acids	To meet requirements
C: Opalescent Solution	Strongly opalescent
Lauric Acid	
Lauric Acid Recovered	15 – 17g/100g
Acid Value	250.0 – 275.0
Hydroxyl Value	96 - 108
Saponification Value	40 - 50
Moisture	≤ 3.0%
Residue on Ignition	≤ 0.25%
Ethylene Oxide	≤ 1.0%
Dioxane	≤ 10ppm
Peroxide Value	≤ 10
Acid Value	≤ 2.0
Gardner Color	≤ 2.0
Heavy Metals	≤ 10ppm
Arsenic	≤ 1ppm
Lead	≤ 2ppm
Residual Solvents	To meet requirements

Approved by:

Date: November 18, 2019



# Gojira Fine Chemicals, LLC

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