



Certificate of Analysis

Tween 80

Catalog Number: TW1005
Lot Number: 0828801
CAS Number: 9005-65-6
Molecular Formula: C₃₂H₆₀O₁₀
Molecular Weight: 604.81
Storage: 15°C – 30°C
Date of Manufacture: February 2, 2016
Retest Date: February 1, 2020

Test	Specification	Result
Appearance	Clear amber liquid	Conforms
Assay (Oxyethylene)	65.00 – 69.50%	67.8%
Equivalency of Polysorbate 80	96.5 – 103.5%	Conforms
pH (5%)	6.00 – 7.00	6.84
Acid Value	≤ 2.0	0.2
Hydroxyl Value	65 - 80	70.1
Saponification Value	45 - 55	49.2
Moisture	≤ 3.0%	2.66%
Heavy Metals	≤ 10.0ppm	< 10.0ppm
1,4-Dioxane	≤ 1.0ppm	< 1.0ppm

Approved by:

John Grubb, PhD
Gojira Fine Chemicals, LLC
Quality Manager
Tel: 440-539-7033 Fax: 888-211-5523
john@gojiraafc.com

Date: August 28, 2018