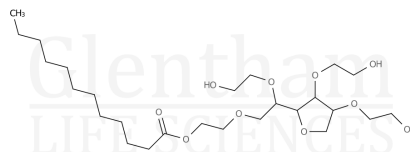


Certificate of Analysis

Product Name	Tween 20
Glentham Code	GD9856
CAS Number	9005-64-5
EINECS	500-018-3
MDL Number	MFCD00165986
Batch Number	127IED
Molecular Weight	1227.54
Molecular Formula	$C_{58}H_{114}O_{26}$
Storage Temp.	+20°C



Property	Specification	Batch 127IED
Physical Description	Clear, Light-yellow to brown-yellow liquid	Clear, yellow liquid
Colour (Gardner)	≤ 5 (25°C)	2
Peroxide Value	≤ 5meq/kg	1meq/kg
Saponification Value	40 - 50 mgKOH/g	45mgKOH/g
Hydroxyl Value	96 - 108 mgKOH/g	102mgKOH/g
Acid Value	≤ 2.0mgKOH/g	1.0mgKOH/g
Sulphated Ash	≤ 0.2%	0.1%
Water	2.5 - 3.0 %	2.8%
Heavy Metals	≤ 10ppm	0ppm
Ethylene Glycol	≤ 620ppm	0ppm
1,4-Dioxane	≤ 10ppm	≤ 1ppm
Ethylene Oxide	≤ 1ppm	≤ 1ppm

Specification Version	v1.1
Manufacture Date	2021-05-27
Re-Test Date	2029-05-24

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glentham.com or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glentham Life Sciences Ltd, 2024