



CERTIFICATE OF ANALYSIS

Product : **TWEEN 80**
(POLYSORBATE 80)
Product number : P1365
Batch number : 016332
Date of analysis : 20-11-2020
Date of expiry : 30-11-2023
Packaging and storage : store at room temperature

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	oily, colourless or brownish-yellow, clear or slightly opalescent liquid	complies		
Identification:				
-A (IR-spectrum)	conform	complies		
-D (composition of fatty acids)	conform	complies		
Acid value	≤ 2.0	1.4	mg KOH	
Hydroxyl value	65 – 80	74	mg KOH	
Peroxide value	≤ 10.0	0.3		
Saponification value	45 – 55	48	mg KOH	
Water content	≤ 3.0	2.3	%	
Total ash	≤ 0.25	0.02	%	
Ethyleneoxide content	≤ 1	< 1	ppm	GC
Dioxane content	≤ 10	< 1	ppm	GC
Composition of fatty acids	conform	complies		
- Oleic acid	≥ 58.0	74.1	%	
- Linoleic acid	≤ 18.0	≤ 0.3	%	
- Linolenic acid	≤ 4.0	≤ 0.0	%	
- Palmitic acid	≤ 16.0	5.0	%	
- Palmitoleic acid	≤ 8.0	1.1	%	
- Stearic acid	≤ 6.0	1.5	%	
- Myristic acid	≤ 5.0	0.2	%	

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

drs. M. van Wissen, pharmacist
Department of Quality Control Duchefa B.V.

Date: 14-07-2021

The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.

Duchefa Biochemie B.V.

