

## CERTIFICATE OF ANALYSIS

Batch: 21D20-A100401477

Product: Ricini oleum virginale Ph. Eur. 1L

Exp. date: 31 JUL 2022

Analyzed according to Ph. Eur. 01/2020:0051

### PERFORMED ANALYSIS AND RESULTS

Analysis	Specification	Result	Remark
Appearance	Clear, slightly yellow, viscous liquid	CONFORM	Hygroscopic
Relative density	About 0,958	0,9602	Data producer
Refractive index	About 1,479	1,4787	Data producer
Identification A	CONFORM	CONFORM	Optical rotation, Data producer
Identification B	CONFORM	CONFORM	Specific absorbance, Data producer
Optical rotation	+ 3,5 - +6,0 °	+ 3,6°	Data producer
Specific absorbance	< = 0,7	0,17	270 nm, Data producer
Acid value	< = 1,5	0,07	Data producer
Hydroxyl value	> = 160	167,6	Data producer
Peroxide value	< = 10,0	2,23	Data producer
Unsaponifiable matter	< = 0,80 %	0,36 %	Data producer
Composition of fatty acids	CONFORM	CONFORM	GC, Data producer
Palmitic acid	< = 2,0 %	1,04 %	Data producer
Stearic acid	< = 2,50 %	1,19 %	Data producer
Oleic acid	2,5 - 6,0 %	3,20 %	Data producer
Linoleic acid	2,5 - 7,0 %	4,19 %	Data producer
Linolenic acid	< = 1,0 %	0,66 %	Data producer
Eicosenoic acid	< = 1,0 %	0,15 %	Data producer
Ricinoleic acid	85,0 - 92,0 %	89,16 %	Data producer
Any other fatty acid	< = 1,0 %	0,41 %	Data producer
Water	< = 0,3 %	0,21 %	Data producer

**RELEASE:**

Conclusion: Conform

Date: 30 APR 2021

**BATCH RELEASED BY:**

X. Van Eecke

Head of QA - Responsible Pharmacist

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