

## Certificat d'analyse

Product: Castor CP Virgin Ph Eur

INCI Name: Ricinus Communis Seed oil

Countries of Origin: India

Batch Code: 104209

Description: A clear, slightly yellow, viscous hygroscopic liquid at 40 oC

Slightly soluble and miscible with acetic acid and with ethanol

Test	Unit	Specification	Result
Free Fatty Acids	mgKOH/g	1.0 max	0.28
Acid value	mgKOH/g	2.0 max	0.56
Peroxide value	meq O <sub>2</sub> /k	10 max	2.73
Colour	Gardner	1.8 max	1.0
Iodine value	g <sub>2</sub> /100	82 – 90	85.58
Moisture	%	0.3 max	0.11
Hydroxyl value	mgKOH/g	150 min	163.23
Saponification value	mgKOH/g	176 – 186	180.26
Ricinoleic acid	%	85 – 92	87.89
Refractive Index 20°C	at 20°C	1.477 – 1.481	1.48
insoluble Impurities	%	0.8 max	< 0.01
Relative density	at 20°C	0.958 – 0.969	0.96
Light absorbance		At 269nm = 0.5	269 nm= 0.34
Optical rotation		+3.5- +6.0	+ 3.60

### Fatty Acid Composition

C 16:0 Palmitic acid	%	2.0 max	1.14
C 18:0 Stearic acid	%	2.5 max	1.34
C 18:1 Oleic acid	%	2.5 - 6.0	3.62
C 18:2 Linoleic acid	%	2.5 - 7.0	4.65
C 18:3 Linolenic acid	%	1.0 max	0.49
C 20:1 Gadoleic acid	%	1.0 max	n.d.
Other fatty acids	%	1.0 max	0.87