



# Certificate of Analysis

**Description:** Castor Oil, CP, Organic

**Lot No:** 70443

**Inci Name:** Ricinus Communis (Castor) Seed Oil

**Cas No:** 8001-79-4

**Einecs No:** 232-293-8

ANALYTICAL DETAILS	RANGE	RESULT
APPEARANCE @20°C	Clear to pale yellow viscous liquid	Conforms
ODOUR	Very slight, Characteristic	Conforms
COLOUR (LOVIBOND 5.25" CELL)	20Y, 2.0R	6.0y, 0.8r
RELATIVE DENSITY @ 20°C (GM/ML)	0.954 – 0.980	0.9611
REFRACTIVE INDEX @ 40°C	1.470 – 1.481	1.4787
LIGHT ABSORBANCE @ 269NM	≤ 1.0	0.133
OPTICAL ROTATION @ 20°C (°)	+ 3.5 to + 6.0	+ 3.6
FREE FATTY ACID (% AS OLEIC)	≤ 1.0	0.25
IODINE VALUE (CALC)	82 – 90	85.57
PEROXIDE VALUE (Meq / kg)	≤ 5.0	0.48
SAPONIFICATION VALUE (mg KOH/g)	176 – 187	179.92
UNSAAPONIFIABLE MATTER (%)	≤ 2.0	0.33
ACID VALUE (MGKOH/GM)	≤ 2.0	0.50
HYDROXIL VALUE (MGKOH/GM)	≥ 150	163.33
MOISTURE (%)	≤ 0.3	<0.14

FATTY ACID PROFILE (MAJOR ACIDS)	ACID NAME	C-CHAIN	RANGE	RESULT
	PALMITIC	C16:0	≤ 2.0	1.27
	STEARIC	C18:0	≤ 2.5	1.43
	OLEIC	C18:1	2.0 – 6.0	3.83
	RICINOLEIC	C18:1 (OH)	85.0 – 95.0	86.88
	LINOLEIC	C18:2	1.0 – 7.0	4.93
	ALPHA LINOLENIC	C18:3	≤ 1.0	0.49
	ICOSENOIC	C20:1	≤ 1.0	0.25
	OTHERS	-	≤ 1.0	< 1.0

Date Produced: May 2014  
 Best Before: December 2015

re-tested : December 2014

R00114

Revised: 10/12/2014