

# Gracefruit Ltd

146 Glasgow Road, Longcroft, Stirlingshire, FK4 1QL

[www.gracefruit.com](http://www.gracefruit.com)

VAT Number: 935 8115 14

EORI Number: GB9358 1151 4000

Company Number: SC374368



# Certificate of Analysis

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

**Lot No:** 41377

**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	0.9612
REFRACTIVE INDEX @ 40°C	1.470 – 1.481	1.4784
LIGHT ABSORBANCE @ 269NM	1.0	0.120
OPTICAL ROTATION @ 20°C (°)	+ 3.5 to + 6.0	+ 3.7
FREE FATTY ACID (% AS OLEIC)	1.0	0.22
IODINE VALUE (CALC)	82 – 90	85.94
PEROXIDE VALUE (Meq / kg)	5.0	0.39
SAPONIFICATION VALUE (mq KOH/g)	176 – 187	180.19
UNSATURATED MATTER (%)	2.0	0.39
ACID VALUE (MGKOH/GM)	2.0	0.44
HYDROXIL VALUE (MGKOH/GM)	150	161.55
MOISTURE (%)	0.3	<0.2

FATTY ACID PROFILE (MAJOR ACIDS)	ACID NAME	C-CHAIN	RANGE	RESULT
	PALMITIC	C16:0		2.0
STEARIC	C18:0		2.5	1.56
OLEIC	C18:1		2.0 – 6.0	4.37
RICINOLEIC	C18:1 (OH)		85.0 – 95.0	85.93
LINOLEIC	C18:2		1.0 – 7.0	5.40
ALPHA LINOLENIC	C18:3		1.0	0.49
ICOSENOIC	C20:1		1.0	0.42
OTHERS	-		1.0	< 1.0

Date Produced: July 2013

Best Before: July 2015

R00114

Revised: 22/10/2013 JD