

Certificate of Analysis

Gracefruit Ltd

Raw Material Code:	R00113	Product Description:	Castor Oil, BP
INCI Name:	Ricinus Communis Seed Oil		
EINECS Number:	232-293-8	CAS Number:	8001-79-4
Date of Production:	May-2016	Best Before:	May-2018
Lot Number:	L000179263	Retest Date:	-

Analytical Details	Result
Appearance	A clear almost colourless or slightly yellow viscous, hygroscopic liquid
Odour	Very slight and characteristic
Specific Gravity @ 20°C	0.9598
Refractive index at 20°C	1.4788
Free Fatty Acid (% as Oleic)	0.27
Moisture (%)	0.19
Peroxide value	0.39
Saponification Value	180.6
Unsaponifiable Matter (%)	0.35
Iodine Value	85.53
Colour (Gardner)	1G
Acid Value	0.54
Optical Rotation	+3.6
Hydroxyl Value	163.86
Light absorbance @ 268nm	0.115
Light Absorbance @ 269nm	0.116
Light Absorbance @ 270nm	0.115

Palmitic Acid	C16:0	1.24
Stearic Acid	C18:0	1.27
Oleic Acid	C18:1	3.57
Ricinoleic Acid	C18:1 (OH)	88.35
Linoleic Acid	C18:2	4.56
Alpha Linolenic Acid	C18:3	0.47
Eicosenoic Acid	C20:1	0.29
Others	-	0.25