

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:	October-2016	Best Before:	October-2018
Lot Number:	L000187788	Retest Date:	-

Analytical Details	Result
Appearance	A clear almost colourless or slightly yellow viscous, hygroscopic liquid
Odour	Very slight and characteristic
Relative Density @ 20°C (g/ml)	0.959
Refractive index at 20°C	1.478
Free Fatty Acid (% as Oleic)	0.28
Moisture Content (%)	0.16
Peroxide value	1.55
Saponification Value	180.53
Unsaponifiable Matter	0.35
Iodine Value	85.61
Colour (Gardner)	Complies
Acid Value	0.56
Optical Rotation	Complies
Hydroxyl Value	163.79
Light Absorbance @ 270nm	0.21

Palmitic Acid	C16:0	1.2
Stearic Acid	C18:0	1.39
Oleic Acid	C18:1	3.85
Ricinoleic Acid	C18:1 (OH)	87.77
Linoleic Acid	C18:2	4.95
Alpha Linolenic Acid	C18:3	0.48
Eicosenoic Acid	C20:1	0.37
Others		≤ 1.0