

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:	August-2016	Best Before:	August-2018
Lot Number:	L000194340	Revised date:	-

Analytical Details	Result
Appearance	A clear almost colourless or slightly yellow viscous, hygroscopic liquid
Odour	Very slight and characteristic
Specific Gravity @ 20°C	0.963
Refractive index @ 20°C	1.479
Free Fatty Acid (% as Oleic)	0.23
Moisture (%)	0.21
Peroxide value (Meq O2/ kg)	1.55
Saponification Value	180.1
Unsaponifiable Matter	0.35
Iodine Value	85.57
Colour (Gardner)	1G
Acid Value (mg KOH/g)	0.46
Optical Rotation	+3.6
Hydroxyl Value (mg KOH/g)	163.85
Absorbance 269nm	0.143

Palmitic Acid	C16:0	1.18
Stearic Acid	C18:0	1.3
Oleic Acid	C18:1	3.6
Ricinoleic Acid	C18:1 (OH)	88.64
Linoleic Acid	C18:2	4.59
Alpha Linolenic Acid	C18:3	0.41
Eicosenoic Acid	C20:1	Not Detected
Others		0.28