

# 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: **February-2017**

Best Before: **February-2019**

Lot Number: **L000207233**

Retested 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 (%)	0.3
Peroxide Value (MeqO <sub>2</sub> /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
Nervonic	C24:1	0.28