

Certificate of Analysis

Gracefruit Limited
209 Glasgow Road
Longcroft
Bonnybridge
FK4 1QQ

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:	June-2017	Best Before:	June-2019
Lot Number:	L000229190	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	0.960
Refractive index @ 20°C	1.479
Free Fatty Acid	0.26
Moisture (%)	0.15
Peroxide Value (MeqO ₂ /kg)	0.37
Saponification Value	180.71
Unsaponifiable Matter	0.36
Iodine Value	85.5
Colour (Gardner)	1G
Acid Value (mg KOH/g)	0.52
Optical Rotation	+3.6
Hydroxyl Value (mg KOH/g)	164.01
Solubility	slightly soluble in light petroleum, miscible with ethanol (96%) and with glacial acetic acid
Light Absorbance @ 270nm	0.151

Palmitic Acid	C16:0	1.91
Stearic Acid	C18:0	1.29
Oleic Acid	C18:1	3.61
Ricinoleic Acid	C18:1 (OH)	87.24
Linoleic Acid	C18:2	4.64
Alpha Linolenic Acid	C18:3	0.42
Eicosenoic Acid	C20:1	<1.0
Others	-	0.89