

## Certificate of Analysis

Raw Material Code	R00113
Product Name	Castor Oil, BP
Inci Name	Ricinus Communis Seed Oil
EINECS Number	232-293-8
Cas Number	8001-79-4

Date of Production	March/2018
Best Before Date	February/2020

Customer Name	GRACEFRUIT LTD
Lot Number	P275551
Sales Order Number	KS056641
Sales Order Line	006
Raw Material Lot	L000261288

Parameter	Result
Appearance	A clear colourless or slightly yellow
Odour	Very slight and characteristic
Peroxide Value (meq O <sub>2</sub> / kg)	0.87
Free Fatty Acid ( % as oleic)	0.13
Acid Value	0.26
Refractive Index @ 20°C	1.477
Relative Density @ 20°C	0.959
Palmitic Acid : C16:0	1.6
Stearic Acid : C18:0	1.27
Oleic Acid : C18:1	3.62
Ricinoleic Acid : C18:1 (OH)	87.83
Linoleic Acid : C18:2	4.71
Alpha Linolenic Acid : C18:3	0.37
Eicosenoic Acid : C20:1	0.42
Iodine Value	85.5
Absorbance 270Nm	0.19
Colour (Gardner)	1
Hydroxyl Value (mg KOH/g)	165.12
Moisture	0.07

Optical Rotation	3.6
Solubility In Alcohol	Complies
Unsaponifiable Matter	0.34

Comments