

### Certificate of Analysis

**Name of Product:** Castor Oil (Cold Pressed)  
**Batch Number:** BBB2424  
**INCI Name:** Ricinus Communis Seed Oil

Test	Standards/Methods	Results
Description	Viscous oily liquid	-
Colour	Clear – pale yellow	-
Odour	Characteristic	-
Relative Density @ 20°C (g/ml)	0.958 – 0.970	0.9604
Refractive Index @ 20°C	1.477 – 1.481	1.4788
Peroxide Value (mEq O <sub>2</sub> /kg)	<10.0	2.27
Iodine Value (g/100g)	82.0 – 90.0	85.11
Free Fatty Acid	<1.0	0.48
Acid Value	<1.5	0.96
Saponification Value (mg KOH/gr)	176.0 – 187.0	180.48
Hydroxyl Value (mg KOH/g)	>160.0	165.67
Unsaponifiable Matter (%)	<0.8	0.37
Optical Rotation @ 20°C	+3.5 – +6.0	+3.6
Moisture and Impurities	<0.30	0.12
Specific Absorbance	<0.7	0.212

Fatty Acid Profile		Range %	Results
C-Chain	Acid Name		
C16:0	Palmitic	<2.0	1.25
C18:0	Stearic	<2.5	1.23
C18:1	Oleic	2.5 – 6.0	3.70
C18:1	Ricinoleic	85.0 – 92.0	88.12
C18:2	Linoleic	2.5 – 7.0	4.74
C18:3	Linolenic	<1.0	0.37
C20:1	Eicosenoic	<1.0	0.26