

## CERTIFICATE OF ANALYSIS

**PRODUCT NAME: CASTOR OIL BP, COLD PRESSED**

**LOT NUMBER: LOT0008000**

PRODUCT INCI: RICINUS COMMUNIS SEED OIL

PRODUCT CODE: K0107

CAS NUMBER: 8001-79-4

EINECS NUMBER: 232-293-8

MANUFACTURING METHOD: COLD PRESSED

MANUFACTURING DATE: 04/09/2020

BEST BEFORE END: 04/03/2022

ANALYTICAL DETAILS	RANGE %	RESULTS
APPEARANCE	VISCOUS OILY LIQUID	-
ODOUR	CHARACTERISTIC	-
COLOUR	CLEAR – PALE YELLOW	-
RELATIVE DENSITY @ 20°C (G/ML)	0.958 – 0.970	0.9608
REFRACTIVE INDEX @ 20°C	1.477 – 1.481	1.4787
PEROXIDE VALUE (MEQ O <sub>2</sub> / KG)	<10.0	2.66
IODINE VALUE (G/100G)	82.0 – 90.0	84.49
FREE FATTY ACID	<1.0	0.24
ACID VALUE	<1.5	0.48
SAPONIFICATION VALUE (MG KOH/GR)	176.0 – 187.0	179.96
HYDROXL VALUE (MGKOH/G)	>160.0	165.89
UNSAAPONIFIABLE MATTER (%)	<0.8	0.35
OPTICAL ROTATION @ 20°C	+3.5 – +6.0	+3.6
MOISTURE & IMPURITIES	<0.30	0.11
SPECIFIC ABSORBANCE	<0.7	-

FATTY ACID PROFILE		RANGE %	RESULTS
C-CHAIN	ACID NAME		
C16:0	PALMITIC	<2.0	1.14
C18:0	STEARIC	<2.5	1.25
C18:1	OLEIC	2.5 – 6.0	3.60
C18:1	RICINOLEIC	85.0 – 92.0	88.24
C18:2	LINOLEIC	2.5 – 7.0	4.61
C18:3	LINOLENIC	<1.0	0.60
C20:1	EICOSENOIC	<1.0	0.15