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TYPICAL ANALYSIS / SPECIFICATION

PRODUCT : CASTOR OIL
SHELF LIFE : THREE YEARS SUBJECT TO CORRECT STORAGE

ITEMS	SPECIFICATION	RESULT
Absorption max determined at the absorption maximum at 269NM +/-NM	Not more than 1	0.89
Characteristics	A clear almost colourless or slightly yellow, viscous, hygroscopic liquid, slightly soluble in light petroleum, miscible with alcohol and with glacial acetic acid.	Pass
Acid value	Mot more than 2.0	0.50
Foreign fatty substances		
A. Solution is clear	To 2 ml add 8 ml of alcohol R. Solution is clear	Passes
B. Net 16.0 ml is required	Shake 10 ml with 20 ml of light petroleum. Allow to separate. The lower layer has a volume \geq 16 ml	Passes
Fatty acid composition by GLC		
Palmitic acid	\leq 2.0%	1.06%
Stearic acid	\leq 2.5%	2.30%
Oleic acid & isomers	2.5 – 6.0%	3.60%
Linoleic acid	2.5 – 7.0%	3.0%
Linolenic acid	\leq 1.0%	0.38%
Eicosenioc acid	\leq 1.0%	0.32%
Ricinosenioc acid	85 – 92%	85%
9-10 Dihydroxy stearic acid	0.3 – 0.7%	0.38%
Any other fatty acid	\leq 1.0%	0.73%
Hydroxyl value	\geq 150	162.3
Iodine value (WIJS)	82 – 90	84.6
Optical rotation	+3.5 - +3.6 Deg	+4.0
Peroxide value	Not more than 10.0	3.23
Refractive index at 20 ⁰	Of about 1.479	1.478
Relative density at 20 ⁰	Of about 0.958	Pass
Saponification value	176 – 187	180.8
Unsaponifiable matter	\leq 0.8%	0.53%
Water	\leq 0.3%	0.138%

CONCLUSION: MATERIAL CONFORMS TO BP2000