## 

## Certificate of Analysis

## (Representative Sample Certificate)

Product Name:	Castor Oil, USP
INCI Name:	Ricinus Communis (Castor) Oil
CAS Number:	8001-79-4
Lot Number:	Not available (data may vary slightly with different lots or batches)
Expiration Date:	36 months from production date

Property	Specification	Analysis
Acid Value	2 KOH/g MAX	0.78 KOH/g
UV Absorption @ 270nm	0.7 - 1.5Abs	0.961 Abs
Water determination	0.3%	0.18%
Hydroxyl Value	160 - 168 KOH/g	163.08 KOH/g
Peroxide Value	10 meq/kg MAX	0.00 meq/kg
Unsaponificable matter	0.8%	0.36%
Distinction	Partially soluble in solvent hexane. Yields a clear	Conforms
	liquid with an equal volume of alcohol.	
Fatty Acid Profile (Area%)		
C:16:0 Palmitic	2.0% MAX	1.40%
C:18:0 Stearic	2.5% MAX	1.23%
C:18:1 Oleic	2.5 - 6.0%	3.54%
C:18:2 Linoleic	2.5 - 7.0%	6.13%
C:18:3 Linolenic	1.0% MAX	0.57%
C:20:1 Eicosenic	1.0% MAX	0.32%
Ricinoleic Acid	85.0 - 92.0	88.54
cis-11-Octadecenoic or	1.0% MAX	0.98%
other unidentified		
Trygliceride Composition		
RRR	90.0% MIN	90.84%
RRL	2.0 - 4.0%	3.98%
RRO	2.5 - 5.0%	4.50%
RRS	0.2 - 0.8%	0.68%

"Certified in compliance with the terms of the US-Canada Organic Equivalency Arrangement. The above data was obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions. This report is not to be signed. All data are as per our supplier.

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