

Supplier of castor oil & derivatives and raw materials for UV curing



Castor oil is natural oil obtained from the seed of the castor plant, produced primarily in India, China and Brazil. Scientific and historical records reveal that regardless of the oil's origin, its chemical nature and composition are remarkably uniform. Castor oil is a triglyceride (ester) of fatty acids.

- Approximately 90% of the fatty acid content is ricinoleic acid, an 18-carbon acid with a double bond in the 9-10 position and a hydroxyl group on the 12<sup>th</sup> carbon.
- This combination of hydroxyl group and unsaturation occurs only in castor oil.
- Because of its highly polar hydroxyl groups, castor oil is compatible with, and can be utilized to plasticize a wide variety of natural and synthetic resins, waxes, polymers and elastomers.
- It has excellent emollient and lubricating properties as well as a marked ability to wet and disperse dyes, pigments and fillers.

## **Urethane Grades of Castor Oil**

**<u>COLM:</u>** Obtained from a mixture of the first pressing and the second phase of production, solvent extraction, with the moisture content lowered to a maximum of 0.03%.

**<u>COLMPP:</u>** Obtained from the first pressing of the castor bean, with the moisture content lowered to a maximum of 0.03%. It is lighter in color and lower in acidity than other grades.

The charts below describe the characteristics and applications for COLM and COLMPP, as well as their specifications.

## **Characteristics and Applications**

Characteristic	Application	
Clear, viscous, light color	Urethane adhesives and sealants	
Non-drying and stable	Urethane coatings	
Broad compatibility	Urethane flooring and foam, liquid dielectrics	
Base compound for reactions	Soaps, textiles	

## **Technical Specifications**

Specification	COLM	COLMPP
Color Gardner	3 max.	2 max.
Acid Value	2 max.	1.5 max.
Moisture %	0.03 max.	0.03 max.
Insoluble impurities	0.02 max.	0.02 max.
Hydroxyl value	160-168	160-168
lodine value	83-88	83-88
Sapon value	175-185	175-185
Viscosity at 25° C	6.3-8.9	6.3-8.9

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