

# Technical data sheet

ALBERDINGK®

Castor Oil Low Acid 0.2

**Characteristic:**

Alberdingk® Castor Oil Low Acid 0.2 is a non-drying, refined oil won from the seeds of "Ricinus communis L." which is different to other vegetable oils due to its special molecular structure. It is specially treated to reach a low acid value.

**Specification:**

			<b>According to:</b>
Acid value	mg KOH/g	0.00 - 0.20	ISO 660
Iodine colour value		0.0 - 4.0	DIN 6271
Gardner colour value		0.0 - 4.0	ISO 4630
Water content	%	0.00 - 0.30	ISO 8534
Iodine value acc. to Wijs	g Iod/100g	82 - 89	ISO 12966
Hydroxyl value	mg KOH/g	160 - 173	ISO 12966

**Further typical data\*:**

			<b>According to:</b>
Refractive index		1.4783 - 1.4800	ISO 6320
Saponification value	mg KOH/g	175 - 187	ISO 12966
Viscosity acc. to Höppler at 20°C	dPas	9.5 - 11.0	ISO 12058-1
Density at 20°C	g/cm <sup>3</sup>	0.955 - 0.968	ISO 2811-1
Solubility			
miscible in any ratio with ethanol (95%)			

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#### Applications:

Due to the low content of free fatty acids, Alberdingk® Castor Oil Low Acid 0.2 is tailor made for the use as polyol in polyurethane systems with the demand for a long pot life time. Other application fields are industry paints based on ricinenealkyds and the plastics, fibre, textile and leather-auxiliaries industry. It is also used in the production of plasticizers, printing inks, soaps, wetting agents and lubricants.

#### Properties:

Castor oil has a unique structure. The triglyceride has up to 85 - 90% of the so called ricinoleic acid (12-hydroxy-oleic acid), which is responsible for the chemical, physical and physiological properties. Castor oil is non-drying; in contrast to other vegetable and animal oils or fats, it is soluble in alcohol and has a viscosity which is 20 times as high. Chemical reactions with the ester groups, the double bonds and the hydroxyl groups allow a wide range of possibilities to produce various derivatives from castor oil.

#### Storage:

The storage life can be guaranteed for minimum 12 months in tightly locked containers and at a temperature of + 10 °C up to + 30 °C.

A turbidity of the oil due to coldness is reversible and can be removed by heating up to more than 40 °C.

#### Safety:

For further information on product safety please refer to the current safety data sheet.

#### Notice:

\* General information - the values can not be considered as part of the product specification.