

Technical data sheet

ALBERDINGK® Pharm. Refined Castor Oil DAB/Ph.Eur.

Characteristic:

ALBERDINGK® Pharmaceutical Refined Castor oil DAB / Ph. Eur. is obtained from the seeds of "Ricinus communis L.". It is pressed without addition of heat (at max. 50 °C) and not solvent extracted. The following refinery (degumming, deacidification, bleaching) guarantees a constant high quality. The oil complies with the monography "Castor oil, refined" of the current version of the European Pharmacopoeia.

Specification:

Acid value	mg KOH/g	max. 0.8	ISO 660
Iodine colour value		max. 1.0	DIN 6271
Water content	%	max. 0.2	ISO 8534
Refractive index		1.4770 - 1.4810	ISO 6320
Peroxide value	mVal/kg	max. 5	ISO 3960
Palmitic acid content	%	0.0 - 2.0	ISO 12966
Stearic acid content	%	0.5 - 1.5	ISO 12966
Oleic acid content	%	2.5 - 4.5	ISO 12966
Octadecenic acid content	%	0.0 - 0.8	ISO 12966
Linoleic acid content	%	2.8 - 6.0	ISO 12966
Linolenic acid content	%	0.2 - 0.8	ISO 12966
11-Eicosenoic acid content	%	0.0 - 0.5	ISO 12966
Ricinoic acid content	%	85.0 - 92.0	ISO 12966
Iodine value acc. to Wijs	g Iod/100g	82 - 89	ISO 12966
Saponification value	mg KOH/g	175 - 187	ISO 12966
Hydroxyl value	mg KOH/g	min. 160	ISO 12966
Absorption at 270 nm		0.70 - 1.50	ISO 3656

According to:

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Further typical data*:

Any other fatty acid	%	<1
Viscosity acc. to Höppler at 20°C	dPas	9.5 - 11.0
Solubility		
miscible in anyratio with ethanol (95%)		

According to:

ISO 12966
ISO 12058-1

Remark:

Appearance: lighter than or as coloured as Reference solution (Ph. Eur. 2.2.1 and 2.2.2)
Foreign Oils: not detected (see monography)
Oil obtained by extraction and adulteration: not detected (see monography)

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Applications:

ALBERDINGK® Pharmaceutical Refined Castor oil DAB / Ph. Eur. is an important raw material in the production of pharmaceuticals where it serves as substrate in the synthesis of active pharmaceutical ingredients or as excipient in products like eye drops, coated tablets, ointment formulations and as solubilizer for hormonal active ingredients. Cosmetic formulations benefit from its positive skin-conditioning and emollient properties and the stabilizing effect in emulsions when used in lipsticks, lotions and other personal care formulations.

Besides it is applied as polyol in the production of polyurethane resins with a high demand for purity and smell. Among these are e. g. in the medicinal sector components for dialysis devices or PU foams for mattresses, too.

The high purity for the mentioned applications is assured by the manufacture and transport in dedicated equipment and containers. Thereby, any contamination with chemicals and/or solvent-extracted oils is excluded.

ALBERDINGK® Pharmaceutical Refined Castor oil DAB / Ph. Eur. does not contain an antioxidant.

Properties:

ALBERDINGK® Pharmaceutical Refined Castor oil DAB / Ph. Eur. consists mainly of triglycerides of ricinoleic acid (12 hydroxy oleic acid). This fatty acid is responsible for the chemical, physical and physiological differences of Castor oil compared to all other vegetable oils. Castor oil is a clear, colourless to pale yellow liquid. 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 are not only possible at the ester groups or the double bonds but at the hydroxyl functionality, too.

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Storage:

The storage life can be guaranteed for minimum 12 months in tightly locked not opened original 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.