

Technical data sheet

ALBERDINGK® HCO Flakes 81

Characteristic:

Hydrogenated Castor Oil(HCO) is a wax-like solid at room temperature. It is derived from Castor Oil (extracted from the seeds of "Ricinus communis L.") by controlled hydrogenation. HCO is produced in form of flakes and powder.

Specification:

Acid value	mg KOH/g	max. 2	According to:	AOCS Cd 3d-63
Gardner colour value		max. 1		ASTM D 1544
Iodine value acc. to Wijs	g Iod/100g	max. 2.5		AOCS Cd 1d-92
Hydroxyl value	mg KOH/g	min. 157		AOCS Cd 13-60
Nickel content	ppm	max. 1		ISO 17294-2/ISO 11885

Further typical data*:

Saponification value	mg KOH/g	175 - 185	According to:	AOCS Cd 3-25
Melting point	°C	min. 85		ASTM D 5440
Palmitic acid content	%	1.0 - 2.0		ISO 12966
Stearic acid content	%	7.0 - 14.0		ISO 12966
12-Hydroxystearic acid content	%	78.0 - 91.0		ISO 12966
Arachidic acid content	%	0.0 - 1.0		ISO 12966
12-Oxostearic acid content	%	0.0 - 5.0		ISO 12966
Any other fatty acid	%	0.0 - 3.0		ISO 12966
Alkaline impurities acc. to the European Pharmacopeia				

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Applications:

Hydrogenated Castor Oil is widely used in the production of multi-purpose calcium and lithium lubricating greases. Lubricating greases produced from HCO exhibit excellent resistances to oils and fats, water and solvents and they endue a long-life stability. HCO also is important as thixotropic agent or as raw material in the production thereof for solvent-based coating systems. Other technical application fields are the use as processing aid for phenolic resins, polyethylene, PVC and rubber and as additive in the application of powder coatings. Non-drying alkyd resins can also be produced out of HCO. Hydrogenated Castor Oil is of importance concerning the production of hot melts like paper coatings for food packaging and the production of hot melt adhesives. In several types of polishes (for cars, shoes, furniture) HCO is an ingredient. Another important field is the use of Hydrogenated Castor Oil and its derivatives (e. g. ethoxylated HCO) in cosmetics like creams, lipsticks etc..

Properties:

Hydrogenated Castor Oil consists mainly of the triglyceride of 12hydroxystearic acid. This is a saturated fatty acid with a hydroxyl functionality and therefore non-drying but suitable for various chemical derivatizations. In most organic solvents it is insoluble but compatible with many waxes and resins.

Storage:

When stored in tightly sealed packaging, protected from light and at temperatures from + 10 °C to + 30 °C, the specification parameters remain stable for at least 12 months from the production date.

Safety:

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

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Notice:

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