

PRODUCT INFORMATION

WARADUR® OP

Product Description

WARADUR® OP is a hard ester wax, consisting of esters of montanic acids with multihydroxyl alcohols. Montanic acids are straight-chained monocarboxylic acids with a chain length in the range of C28 – C32. The corresponding esters exhibit chain length in the range of C58 – C66. WARADUR® OP is partially saponified and contains calcium montanate in addition to the montanic acid esters.

General Advantages

WARADUR® OP is characterised by its high gloss and its high retention capacity for organic solvents such as white mineral spirits. WARADUR® OP can bind up to twenty times their own weight of these solvents to form pastes with a fairly stiff texture which do not become liquid.

Examples of Use

- WARADUR® OP can be used to manufacture high-quality solvent-based wax polishes for floors, shoes, furniture, etc. The pastes prepared from WARADUR® OP are colloidal and therefore transparent. Combinations of WARADUR® OP with WARADUR® E or WARADUR® OZN form pastes with a creamier texture.
- Other applications: paper coating; heat-transfer labelling formulations.

Delivery Specifications *

Characteristics	Unit	Target value	Method
Acid value *	mg KOH/g	6 – 14	ISO 2114
Saponification value *	mg KOH/g	110 – 130	ISO 3681
Drop point *	°C	99 – 105	ASTM 3954
Colour	–	light yellowish	AA 3.2.1.505
Viscosity @ 120 °C	mPas	150 – 300	AA 3.2.1.520
Density	g/cm ³	1.00 – 1.02	Ph. Eur. 2.2.5

Packaging and Handling

Physical form	Flakes, also available as powder
Packaging	Paper bag or Big Bag
Storage	Store at ambient temperature on a dry place. Protect from heat/overheating and direct sunlight. The minimum remaining period is 1.5 years and is defined as the minimum shelf life at the customer. Thereafter, tests of the chemical characteristics are recommended. The maximum shelf life of 5 years is indicated.

Safety

WARADUR® OP

- is made from a fossil biological source
- in a test for ready biodegradability showed 22 % biodegradability, which can be considered as indication for inherent primary biodegradability, according to OECD (2006)
- is not classified as carcinogenic, mutagenic or reprotoxic; no health or environmental hazards are known, provided it is applied in industrial and professional settings

Delivery Time and Availability

Standard delivery time: 2 – 3 weeks. Preconditions can be met for achieving shorter delivery times on standard products when demanded by the market.

Legislation

Food contact legislation:

- FDA 175.105 Adhesives
- FDA 177.2600 Rubber articles intended for repeated use
- FDA 178.3770 For use in lubricants in the fabrication of vinyl chloride plastic food contact articles
- Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food

Other legislation:

- REACH, RoHS and CONEG compliant
- Listed in all relevant National Inventories

For further information, please contact application@voelpker.com.