

PRODUCT INFORMATION

WARADUR® E

Product Description

WARADUR® E (INCI: Glycol Montanate) is a montan ester wax (C18 – 36 ethylene glycol ester). Montanic acids are straight, long-chained monocarboxylic acids, which in WARADUR® E are esterified with ethylene glycol to glycol montanate.

General Advantages

- Stabilising and oil-binding/oil-regulating
- Improves water resistance in sun protective formulations
- Texture optimisation
- Dispersing aid for pigments in decorative cosmetics (eye shadow, mascara, eye liner)

In cosmetic formulations, WARADUR® E can support the stability and improves the skin protection. WARADUR® E can trigger an occlusion effect, which reduces skin moisture evaporation and proved the skin with a protective, breathable film. This property can also improve the cold protection of cosmetic formulations at low temperatures resp. strong wind. In w/o emulsions this functionalised wax acts stabilising and oil-binding. In concentrations over 1 % WARADUR® E can improve the long-term stability and provides a soft skin sensation.

On the basis of its a.m. properties WARADUR® E can be used to reformulate Candelilla wax based composition. Technical support available upon request.

Examples of Use

WARADUR® E can be used to manufacture cosmetics as for example in mascara, hair wax, deodorant sticks as consistence-giving and oil-binding wax. Further possible uses: skin protection products, all-purpose creams, sun protective formulations, stick formulations, eye liner.

Delivery Specifications *

Characteristics	Unit	Target value	Method
Acid value *	mg KOH/g	15 – 20	ISO 2114
Drop point *	°C	82 – 88	ASTM 3954
Saponification value	mg KOH/g	approx. 140 – 160	ISO 3681
Colour	–	pale yellow	AA 3.2.1.505
Viscosity @ 120 °C	mPas	15 – 20	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 maximum shelf life is 5 years after production. Thereafter, tests of the chemical characteristics are recommended. After delivery, a minimum remaining shelf life at the customer of 1.5 years is warranted.

Safety

WARADUR® E

- is made from a fossil biological source
- based on data from similar montan ester waxes: expected to reach the criteria for inherent biodegradability (OECD Guideline 301 D, Closed Bottle Test)
- 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, FDA 177.2600, FDA 178.3770
- Commission Regulation (EU) No 10/2011 of 14 January 2011

Other legislation:

- REACh, RoHS and CONEG compliant
- CAS No: 73138-45-1
- EC No: 277-291-8
- Listed in all relevant National Inventories

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