

RHEOBYK-7590 PC

Vegan, organic rheology additive based on a natural castor oil derivative for oil phases in personal care applications. Provides thixotropic stabilization and high thickening (COSMOS APPROVED, NATRUE Approved).



COSMOS
APPROVED



NATRUE Approved

Product data

Composition

Castor oil derivative (INCI: Trihydroxystearin)

Vegan

Typical properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density (20 °C):	1.02 g/ml
Melting range:	84–88 °C
Sieve passing (325 mesh/44 µm):	min. 99 %
Acid value:	max. 4 mg KOH/g
OH value:	155–164 mg KOH/g
Iodine value:	max. 4 g/100 g
Saponification value:	176–182 mg KOH/g
Color:	white
Delivery form:	free-flowing powder

Storage and transportation

RHEOBYK-7590 PC should be transported and stored dry in unopened original packaging at temperatures between 0 °C and 30 °C.

Applications

Personal care

Special features and benefits

RHEOBYK-7590 PC stabilizes pigments in suspensions and improves the thermal stability of waxy formulations. In addition, the additive serves to thicken medium- to low-polar or aliphatic solvents (especially typical cosmetic oils), to stabilize water-in-oil emulsions and to regulate the flow behavior and yield point of formulations. It is translucent when dissolved and produces a very soft skin-feel, resulting in appealing sensory properties. Additionally, it can be used as an emollient, conditioning agent and water repellent. The additive is especially recommended for thickening and stabilizing natural cosmetic formulations.

Recommended use

Creams and lotions	■
Sunscreen products	■
Hair styling products	■
Liquid makeup	■
Lipsticks	■
Lip glosses	■
Pressed powders	■
Antiperspirants/deos	■

■ especially recommended □ recommended

Recommended levels

1–7 % additive (as supplied) based on the total formulation, depending on the rheological properties desired.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

RHEOBYK-7590 PC should be added to the oil phase at the beginning of the dispersion process, preferably by pre-mixing for 5–10 minutes with the solvent or oil.

The effectiveness of the additive is sensitive to temperature and system polarity. For optimal performance, RHEOBYK-7590 PC should be fully activated by mixing the formulation at a temperature of 35–65 °C for 20 minutes with high shear forces. If the temperature is too low or exceeds the maximum activation temperature of 65 °C, seeding (building of soft gel-like particles) may occur. In this case, it is recommended to rework the formulation by heating to 55–65 °C and stirring with high shear. The formulation should be stirred during cooling to prevent recrystallization.



**Your local
contact**

BYK-Chemie GmbH
Abelstraße 45
46483 Wesel
Germany
Tel +49 281 670-0
Fax +49 281 65735

info@byk.com
www.byk.com

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This issue replaces all previous versions.