BYK-UV 3590

Crosslinking, silicone-containing surface additive for radiation-curing printing inks and overprint varnishes for reducing tape adhesion (improving tape release), increasing surface slip and creating structural effects.

Product data

Composition
Polyether modified radiation-curing polydimethylsiloxane

SVHC label-free (EU SDS)

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

Density (20 °C):	0.98 g/ml
Active substance:	100 %
Refractive index (20 °C):	1.411

Storage and transportation
To be stored and transported at a temperature below 40 °C. Protect the additive from direct sunlight.

Applications

Printing inks

Special features and benefits
BYK-UV 3590 is particularly suitable for UV-curing printing inks and overprint varnishes. The additive accumulates on the surface due to its very high interfacial activity. Due to its acrylic functionality, it can be incorporated into the polymer composite and thus permanently anchored to the surface. There it causes a reduction in adhesive tape adhesion (improvement of tape release properties) and leads to a particularly significant increase in surface slip. In addition, BYK-UV 3590 exhibits very good defoaming properties and has only a slight influence on the turbidity of the system. By using BYK-UV 3590, it is also possible to create structural effects in overprint varnishes and printing inks.

Recommended use
BYK-UV 3590 is particularly recommended for all non-aqueous, radiation-curing flexographic, offset and screen printing inks as well as for radiation-curing overprint varnishes.

Recommended levels
0.1–5 % additive (as supplied) based upon the total formulation, in exceptional cases up to 10 %.

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

Incorporation and processing instructions
The additive can be incorporated during any stage of the production process, including post-addition.

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

info@byk.com
www.byk.com