

BYK-C 8014

Solvent-free, polymeric coupling agent for increasing the mechanical strength of carbon-fiber-reinforced radical curing systems. Recommended for vinyl ester resins thickened with isocyanates.

Product Data

Composition

Solution of a copolymer with functional groups

Typical Properties

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

Density (20 °C):	1.12 g/ml
Refractive index:	1.469
Non-volatile matter (10 min., 150 °C):	> 90 %

Storage and Transportation

To be stored and transported at a temperature below 40 °C.

Special Note

The color of the material changing or becoming darker has no effect on the product's effectiveness.

Applications

Thermosets

Special Features and Benefits

BYK-C 8014 has been specially developed for use in carbon-fiber-reinforced radical curing systems. It is particularly recommended for vinyl ester resins thickened with isocyanates. The additive improves the mechanical properties of the finished component through increased fiber-matrix bonding. The extent of the increase depends on the carbon fiber and matrix system chosen. The additive reduces the range of measurement dispersion, thereby improving measuring accuracy and consequently component quality.

Recommended Use

BYK-C 8014 is recommended for all carbon-fiber-reinforced radical curing systems. The additive significantly increases strength, especially in hot curing processes such as SMC/BMC, in which isocyanates are used as thickeners.

Recommended Levels

1-10 % additive (as supplied) on resin.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

BYK-C 8014 can be added to the resin or the SMC paste.

Special Note

BYK-C 8014 usually has no effect on the system's reactivity. We nevertheless recommend testing the reactivity before production.



Additive Guide



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This issue replaces all previous versions – Printed in Germany