BYK-R 607

Rheology additive for solvent-free and solvent-borne systems to enhance the rheological properties in conjunction with hydrophilic fumed silica and clay additives.

Product Data

Composition
Solution of amine functional oligoamides

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

Density (68 °F):	8.18 lbs/US gal
Refractive index (68 °F):	1.517
Viscosity:	20000 mPa·s

Food Contact Legal Status
For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Applications

Ambient Curing Systems

Special Features and Benefits
BYK-R 607 is a rheology additive for the thixotropic enhancement of solid thixotropes e.g. hydrophilic fumed silica or clay additives. The additive reinforces the network developed by the thixotrope, ensuring that it does not break down, as it usually would, when the amine hardener is added. BYK-R 607 enables hydrophilic fumed silica or clay additives to be used alone in 2-component epoxy systems. When using BYK-R 607, it is not necessary to use hydrophobic fumed silica in epoxy resin and hydrophilic fumed silica in the curing agent to achieve very high layer thicknesses. The additive is added to the curing agent. The spontaneous increase in viscosity is achieved by the formation of hydrogen bonds between the thixotrope and the BYK-R 607. The formulator is now able to rely on inexpensive hydrophilic, pyrogenic fumed silica or clay additives, without having to compromise the application properties. This enables an automatic reduction in raw materials costs and improves the quality of the product.

Recommended Use

Epoxy resin systems	■
Polyurethane systems	□
Acrylate systems	□

■ especially recommended □ recommended

Recommended Levels
20-80 % additive (as supplied), always based on the percentage of hydrophilic, pyrogenic fumed silica and clay additive in the system.

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

Incorporation and Processing Instructions
It is recommended to add the BYK-R 607 additive to the amine hardener. If the utilized amine hardener also contains hydrophilic fumed silica or clay additive, this must be taken into consideration when calculating the amount of additive that is to be used.

Special Note
BYK-R 607 is effective only in combination with hydrophilic types of fumed silica and clay silicates. The quantity of additive to be added can vary depending on the amine hardener that is used.

Coatings Industry

Special Features and Benefits
BYK-R 607 is a rheology additive for the thixotropic enhancement of solid thixotropes e.g. hydrophilic fumed silica or clay additives. The additive reinforces the network developed by the thixotrope, ensuring that it does not break down, as it usually would, when the amine hardener is added. BYK-R 607 enables hydrophilic fumed silica or clay additives to be used alone in 2-component epoxy systems. When using BYK-R 607, it is not necessary to use hydrophobic fumed silica in epoxy resin and hydrophilic fumed silica in the curing agent to achieve very high layer thicknesses. The additive is added to the curing agent. The spontaneous increase in viscosity is achieved by the formation of hydrogen bonds between the thixotrope and the BYK-R 607. The formulator is now able to rely on inexpensive hydrophilic, pyrogenic fumed silica or clay additives, without having to compromise the application properties. This enables an automatic reduction in raw materials costs and improves the quality of the product.

Recommended Use

Protective coatings	☐
Architectural coatings	☐
General industrial coatings	■

■ especially recommended ☐ recommended

Recommended Levels
20-80 % additive (as supplied), always based on the percentage of hydrophilic, pyrogenic fumed silica and clay additive in the system.

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

Incorporation and Processing Instructions
It is recommended to add the BYK-R 607 additive to the amine hardener. If the utilized amine hardener also contains hydrophilic fumed silica or clay additive, this must be taken into consideration when calculating the amount of additive that is to be used.

Special Note
BYK-R 607 is effective only in combination with hydrophilic types of fumed silica and clay additives.
The quantity of additive to be added can vary depending on the amine hardener that is used.

Adhesives

Special Features and Benefits

BYK-R 607 is a rheology additive for the thixotropic enhancement of solid thixotropes e.g. hydrophilic fumed silica or clay additives. The additive reinforces the network developed by the thixotrope, ensuring that it does not break down, as it usually would, when the amine hardener is added. BYK-R 607 enables hydrophilic fumed silica or clay additives to be used alone in 2-component epoxy systems. When using BYK-R 607, it is not necessary to use hydrophobic fumed silica in epoxy resin and hydrophilic fumed silica in the curing agent to achieve very high layer thicknesses. The additive is added to the curing agent. The spontaneous increase in viscosity is achieved by the formation of hydrogen bonds between the thixotrope and the BYK-R 607. The formulator is now able to rely on inexpensive hydrophilic, pyrogenic fumed silica or clay additives, without having to compromise the application properties. This enables an automatic reduction in raw materials costs and improves the quality of the product.

Recommended Use

Reactive adhesives based on epoxy resins.

Recommended Levels

20-80 % additive (as supplied), always based on the percentage of hydrophilic, pyrogenic fumed silica and clay additive in the system.

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

Incorporation and Processing Instructions

It is recommended to add the BYK-R 607 additive to the amine hardener. If the utilized amine hardener also contains hydrophilic fumed silica or clay additive, this must be taken into consideration when calculating the amount of additive that is to be used.

Special Note

BYK-R 607 is effective only in combination with hydrophilic types of fumed silica and clay additives. The quantity of additive to be added can vary depending on the amine hardener that is used.

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Additive Guide

BYK USA Inc.
524 South Cherry Street
P.O. Box 5670
Wallingford, CT 06492
USA
Tel 203 265-2086
Fax 203 284-9158

cs.usa@byk.com
www.byk.com/additives

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