

BYK-AQUAGEL 7100

Rheology additive based on a natural, highly purified, delaminated phyllosilicate for aqueous systems for the adjustment of a thixotropic flow behavior. Easy incorporation combined with high effectiveness.

Product data

Composition

Highly purified, natural phyllosilicate

Typical properties

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

Loose bulk density: 450–650 kg/m³

Moisture content: max. 13 %

Storage and transportation

To be stored and transported between 0 and 40 °C.

Applications

Coatings industry

Special features and benefits

BYK-AQUAGEL 7100 is a rheology additive based on a natural, highly purified phyllosilicate that generates thixotropic flow behavior. In comparison to conventional natural phyllosilicates, BYK-AQUAGEL 7100 comes in a considerably more open, delaminated form, which facilitates its processability and increases its effectiveness. As a result, the final viscosity is achieved with lower shear forces and shorter dispersion times. The additive is particularly suitable for improving storage stability by preventing solid substances from settling. It can also improve the application properties of more highly filled systems and increase sag resistance, enabling higher film thicknesses.

BYK-AQUAGEL 7100 allows the manufacturing of highly filled, flowable intermediates that can be further processed universally without additional dispersion and remain low-viscosity and storage-stable over a long period.

The additive is inorganic and stable to diluted bases and common diluted acids.

Recommended use

BYK-AQUAGEL 7100 is suitable for a multitude of aqueous paint systems and especially for use in matted and pigmented wood coating systems, emulsion plasters, emulsion paints, and pigment concentrates.

Architectural coatings	<input checked="" type="checkbox"/>
Wood and furniture coatings	<input checked="" type="checkbox"/>
Marine coatings	<input type="checkbox"/>
Protective coatings	<input type="checkbox"/>

☒ especially recommended ☐ recommended

Recommended levels

0.1–3.0 % additive (as supplied) based on the total formulation.

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

Incorporation and processing instructions

Due to its easy incorporation, BYK-AQUAGEL 7100 can be added to filled systems directly as a powder during the dispersion phase while stirring slowly and continuously. Alternatively, it can also be added as a flowable intermediate. For this purpose, 5 to 8 % of the powder is distributed and dissolved homogeneously in water. The flowable and pumpable suspension is ready for further processing after approx. 10 minutes using medium shear forces. No wetting and dispersing additives are necessary to solubilize the storage-stable intermediate.

Special note

The product should be added to pigment concentrates during dispersion along with other solid substances.

Construction chemicals**Special features and benefits**

BYK-AQUAGEL 7100 is a rheology additive based on a natural, highly purified phyllosilicate, enabling the adjustment of a targeted rheological property profile in aqueous and highly filled construction formulations. Its easy handling as an intermediate in neutral and alkaline pH ranges allows for universal use. In addition to storage stability in paste-like systems and anti-sagging properties, the product also primarily improves workability properties during application.

Recommended use

Particularly suitable for paste-like construction formulations.

Joint compounds and putties	<input checked="" type="checkbox"/>
Tile adhesives	<input type="checkbox"/>

☒ especially recommended ☐ recommended

Recommended levels

0.2–1.0 % additive (as supplied) based on the total formulation.

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 addition of BYK-AQUAGEL 7100 is preferred for use as an all-purpose, flowable intermediate. For this purpose, 5 to 8 % of the powder is distributed and dissolved homogeneously in water. The flowable and pumpable suspension is ready for further processing after approx. 10 minutes using medium shear forces.

Adhesives and sealants

Special features and benefits

BYK-AQUAGEL 7100 is a rheology additive based on a natural, highly purified phyllosilicate, enabling the adjustment of a targeted rheological property profile in aqueous and highly filled adhesives and sealants formulations. In comparison to conventional natural phyllosilicates, BYK-AQUAGEL 7100 comes in a considerably more open, delaminated form, which facilitates its processability and increases its effectiveness. As a result, the final viscosity is achieved with lower shear forces and shorter dispersion times. The additive is particularly suitable for improving sag resistance of adhesives and sealants formulations. It can also enhance storage stability and prevent fillers from settling.

Recommended levels

0.2–3.0 % additive (as supplied) based on the total formulation.

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

Incorporation and processing instructions

Due to its easy incorporation, BYK-AQUAGEL 7100 can be added to filled systems directly as a powder during the dispersion phase while stirring slowly and continuously. Alternatively, it can also be added as a flowable intermediate. For this purpose, 5 to 8 % of the powder is distributed and dissolved homogeneously in water. The flowable and pumpable suspension is ready for further processing after approx. 10 minutes using medium shear forces. No wetting and dispersing additives are necessary to solubilize the storage-stable intermediate.



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This issue replaces all previous versions.