

CLAYTONE-MPQ

Highly efficient organophilic phyllosilicate for a particularly wide polarity range – free of crystalline silica and improved storage stability

The specific organic modification of natural phyllosilicates allows customized rheology additives to be developed for any polarity range. Depending on the filler content and dosage, these organophilic phyllosilicates offer thixotropic or pseudoplastic flow behavior and cause an increase in viscosity in the low shear range. However, the crystalline silica (quartz) usually contained in typical organophilic phyllosilicates must be labeled as carcinogenic outside Europe.

BYK has therefore developed a new organically modified phyllosilicate that is completely free of crystalline silica and can also be used in a particularly wide polarity range. CLAYTONE-MPQ improves sag resistance, anti-settling properties, and storage stability in non-polar alkyd systems as well as in medium-polarity polyurethanes or high-polarity epoxy coatings. The sag resistance of 2-pack epoxy formulations remains excellent even after storage. The additive has no negative influence on the optical properties of the coating, such as gloss.



Benefits

- Viscosity increase in the low shear range
- Therefore improvement in
 - Sag resistance (also in epoxy systems after storage)
 - Anti-settling properties
 - Storage stability
- Especially wide application range from low-polarity to high-polarity systems (also for aromatic-free systems)

Free of crystalline silica (quartz)

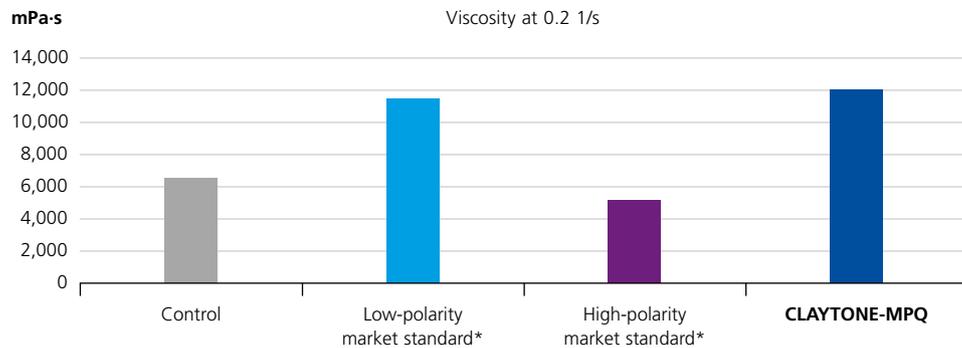
Technical data

- Organophilic phyllosilicate
- Bulk density: 341–434 kg/m³
- Moisture content: max. 3 %
- Delivery form: powder
- Recommended dosage: 0.3–3 % additive (as supplied) based on the total formulation.

Areas of application

- Marine and protective coatings
- General industrial coatings
- Architectural coatings

CLAYTONE-MPQ – Strong viscosity increase in the low shear range in a lower-polarity alkyd system

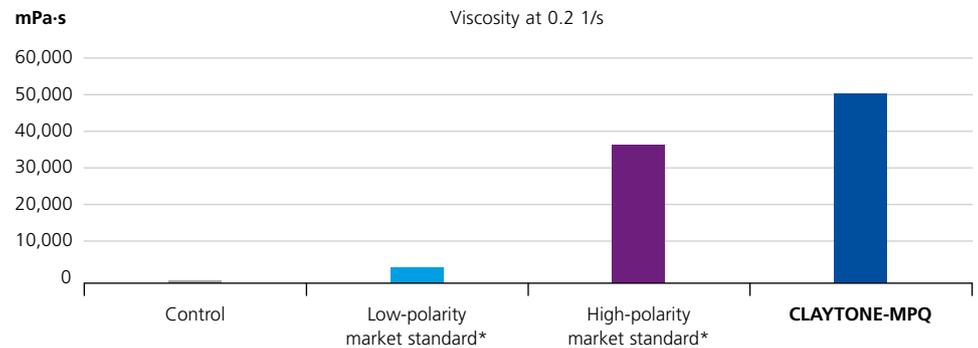


Test system: Lower-polarity, solvent-borne alkyd primer

Additive dosage: 0.5% based on the total formulation

Test method: Anton Paar, MCR 302, PP50, 500 µm gap, shear rate: 0.1–1,000 1/s

CLAYTONE-MPQ – Strong viscosity increase in the low shear range in a higher-polarity 2-pack epoxy system

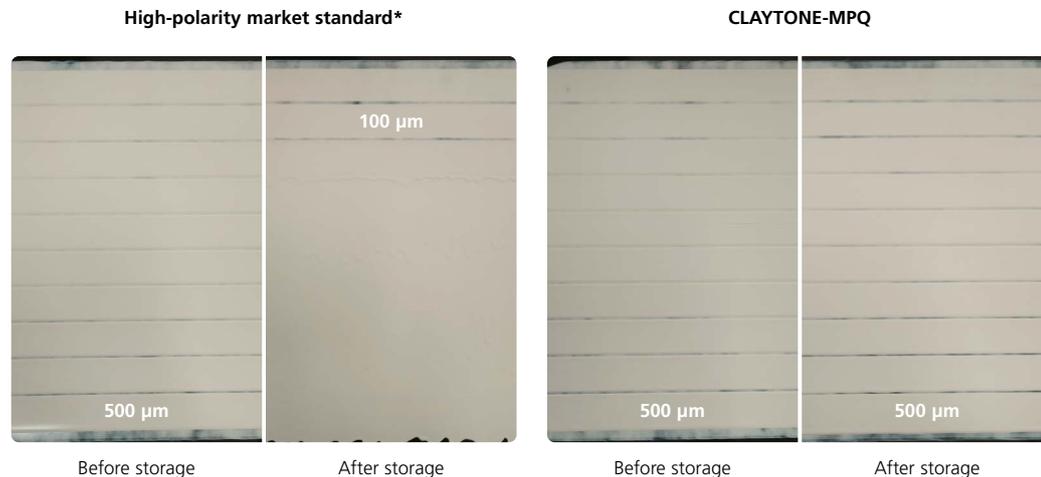


Test system: Higher-polarity, high-solid 2-pack epoxy primer

Additive dosage: 1.5% based on the component A

Test method: Anton Paar, MCR 302, PP50, 500 µm gap, shear rate: 0.1–1,000 1/s

CLAYTONE-MPQ – Significant improvement in the storage stability of 2-pack epoxy coatings



Test system: Higher-polarity, high-solid 2-pack epoxy primer

Additive dosage: 1.5% based on the component A

Test method: Sag applicator, WFT 50–500 µm

Storage conditions: 4 weeks, 40 °C

* Organically modified phyllosilicate



Your local contact

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

info@byk.com
www.byk.com

ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKJET®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULLCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, NANOBYPK®, OPTIBENT®, OPTIGEL®, PURABYPK®, RECYCLOBYPK®, RHEOBYPK®, SCONA®, SILBYPK®, TIXOGEL® and VISCOBYPK® are registered trademarks of the BYK group.

The information contained herein is based on our current knowledge and experience. No warranties, guarantees and/or assurances of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. Any information about suitability, use or application of the products is non-binding and does not constitute a commitment regarding the products' properties, use or application. Contractual terms and conditions, in particular agreed product specifications, always take precedence. We recommend that you test our products in preliminary trials to determine their suitability for your intended purpose prior to use. We reserve the right to make any changes and to update the information herein without notice.



Download our app:
byk.com/app