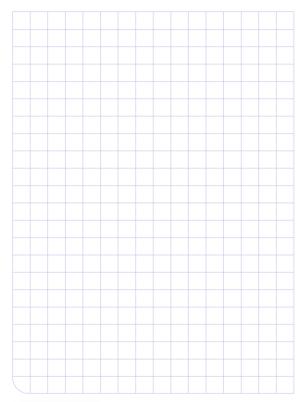




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Notes







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Dear visitor,

we hope you enjoyed your visit to the BYK booth at the European Coatings Show 2025.

We would like to invite you to take part in a short survey about your visit. Please tell us what we did well, but also how we can improve. Your feedback is very valuable to us as it will help us to better meet your needs next time you visit our booth.

Thank you for your help!



Welcome to BYK!

Discover how we can make your product development even more efficient and sustainable by means of differentiating solutions.

In practice, what this means for you is:

- PFAS-free solutions: Develop PFAS-free systems without compromising on performance – with our innovative, even more sustainable additives. Our additives meet the highest quality standards and help you to reduce the impact on the environment while delivering outstanding performance.
- Shortened development cycles: With our unique digital lab, the HTS facility, we can efficiently test up to 220 samples in just 24 hours. This speeds up your product development enormously and launches your customized solutions faster on the market.

• Sustainability in all areas: Our more sustainable wax additives or our environmentally friendlier powder defoamers help you to achieve your ecological goals. Are you looking for something else? Then talk to us, we're sure to find a solution!

Since our foundation in 1873, we at BYK have been striving for innovation and customer benefit. Let us show you how we can also drive your development forward in the future with first-class additive solutions and in-depth industry expertise.

Simply change with us – to a more efficient and sustainable future!

#ECS2025

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9

BYK markets

Architectural coatings

The range of decorative coatings covers interior wall paints, decorative wood and metal coatings as well as external coatings for facades and road marking paints. In addition, pigment concentrates for tinting systems (both point-of-sales and in-plant tinting) are an essential part of the range of applications and related binder systems. From clear coats to highly filled paints, BYK offers special additives that comply with legal requirements for both aqueous and solventborne systems. There is an extensive additive portfolio for decorative and architectural coatings. Wetting and dispersing agents are just as important as defoamers, rheological and surface additives.

Floor coatings

Once reserved for warehouses, multi-storey car parks and production sites, the use of liquid polymer coatings is gaining popularity in many commercial spaces, shopping centers and hospitals. Regulatory oversight has increased significantly at the same time. For this reason, the use of water-based and solvent-free systems is even more important. BYK additives for floor coatings simplify system handling and make it possible to obtain more reproducible results.

Construction chemicals

BYK offers environmentally friendly solutions for construction applications incl. cement-based systems. concrete formulations and admixtures. The innovative product portfolio contains different types of high-performance additives, particularly for cement-based applications such as dry mix mortars, concrete formulations and admixtures. Our rheology modifiers improve application and workability properties while our defoamers enhance de-aeration and prevent foam formation. The range of wetting and dispersing and surface additives finally provide pigment stabilization and leveling properties.

10 ADDITIVES

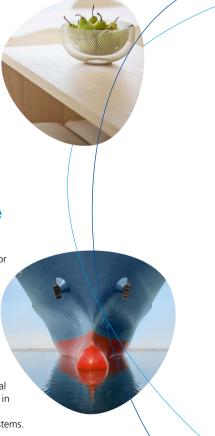
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Wood and furniture coatings

BYK formulates premium additives distinctively for wood coating systems, offering high quality performance characteristics like: easy-to-clean, scratch-resistance, UV resistance, excellent surface leveling and provide exceptional pigment stabilization within pigmented systems.

Marine and protective coatings

BYK offers special rheology additives for marine, protective and intumescent coatings. Especially to provide extraordinary film thicknesses against aggressive environments to avoid negative effects on the long term performance, or to improve the fire resistance, is the focus in this end use, besides many other demands. Whether it be the primer, filler, or top coat, BYK offers a wide range of special selected additives to assist formulators in developing high performance marine/ protective and intumescent coating systems.



Automotive coatings

Automotive OEM coatings

BYK offers additive solutions for aqueous and solvent-borne automotive OEM coatings, such as cathodic electro deposition, primers, monolayer topcoats, basecoats and clearcoat systems. Our various additive families improve surface properties such as gloss and leveling, support brilliance and color intensity, and help orientation of effect pigments to optimize the flop effect. Furthermore, BYK additives also prevent foam and the associated defects.

Automotive refinish coatings

Our additive solutions show positive effects in both aqueous and solvent-borne automotive refinish coatings, such as putty primers, monolayer topcoats, basecoats and clearcoat systems. Our various additive families offer solutions for improving surface properties such as gloss and leveling, support brilliance and color intensity, and help orientation of effect pigments to optimize the flop effect. BYK also offers suitable solutions to prevent foam and the associated defects. Sandability and polishability are also challenges which can be positively influenced by our additives.

Can coatings

High surface smoothness, very good scratch and abrasion resistance, absence of bubbles, good substrate adhesion and very good leveling are decisive characteristics for can coatings. BYK offers additives which are suitable for food contact applications according to certain regulations and can be used in solvent-borne, aqueous and radiation-cured can coating systems

Coil coatings

The high speeds of industrial band coating lines and the subsequent extreme deformation of the coated sheets demand coatings with very good color stability. They must also be free of foam, provide excellent leveling, adhere well and have surface characteristics such as smoothness, scratch and abrasion resistance, and also enhanced easy to clean properties. With BYK additives, these properties can be achieved in all coil coating application areas.



General industrial coatings

Industrial coatings are used on plastic, metal, and mineral substrates. The application areas are versatile and so are the required additives. BYK additives provide solutions for pigment stabilization, defoaming, improved surface properties and rheology control in aqueous, solventborne and solvent-free formulations.

Powder coatings

Powder coatings are one of the most environmentally friendly coating systems. They are 100 % solid and they contain no harmful VOC's. BYK offers a wide range of additives for powder coatings that improve leveling, prevent craters and enhance degassing and pigment wetting. A special range of additives is used to improve processing conditions and other types provide structured or textured surfaces. BYK also provides the right additives for clear powder coatings as well as UV powders.

Printing inks

Printing speeds in conventional printing are becoming ever faster, with a corresponding increase in the demands on the printing inks used. BYK additives help meet these increased requirements and develop the optimum printing inks. Whether to improve the color strength and transparency of a printing ink, to improve the abrasion resistance of printing inks and overprint varnishes, for efficient defoaming or to improve the wetting behavior – BYK offers the fitting additives for aqueous, solvent-borne and radiation-curing systems. Of course, they are also suitable for food contact applications according to certain regulations.

Inkjet inks

Inkjet printing is becoming increasingly important in many areas in which substrates have traditionally been printed using exclusively conventional means, e.g. in packaging printing on paper, cardboard and foil, on ceramic substrates or on textiles. For all applications, BYK offers the fitting additives to support the formulation of inkjet inks, even in areas in which indirect contact with food is required. BYK additives ensure low-viscosity and long-term stable inkjet inks with optimum color strength, improve the jetting properties and abrasion resistance of aqueous, radiation-curing, solventborne and ceramic inkjet inks.

Adhesives and sealants

BYK is your expert technology partner when it comes to purposefully improving the properties of your adhesives and sealants. BYK offers additives for all kinds of adhesive systems, from aqueous dispersion adhesives to solvent-borne systems or solvent-free reactive systems such as polyurethanes, epoxides, acrylates and silane-terminated polymers. In addition, BYK is continuously expanding its range in the field of hot-melt adhesives.

Wetting and dispersing additives

DISPERBYK-2013 o

Solvent-free wetting and dispersing additive for 100 % UV, solvent-borne UV, and aqueous UV systems.

DISPERBYK-2013 with its 100% active substance is particularly well-suited for UV-curing printing inks and coatings. It provides a consistent, low viscosity development during the manufacture of printing inks and coatings and prevents a thixotropic profile, resulting in excellent storage stability.

As DISPERBYK-2013 has a remarkably narrow molecular weight distribution, resulting in an excellent dispersion and stabilization of, in particular, organic pigments and carbon blacks, it notably enhances the transparency of UV-curing printing inks while simultaneously giving color strength. The 100% solid DISPERBYK-2013 does not introduce any solvents into the formulation.



Benefits

- Well-balanced product polarity
- Solvent-free, liquid additive with 100 % active substance
- Effective viscosity reduction with minimized thixotropic flow behavior
- Enhanced storage stability of the formulated coating systems
- Significantly improved optical properties, such as
- color strength and transparency
- increased gloss and minimized haze

Applications

- Printing inks
- Industrial coatings
- Wood and furniture coatings

Wetting and dispersing additives

DISPERBYK-2152

Emission-free, hyperbranched wetting and dispersing additive for solvent-free epoxy systems and other reactive systems; conforms to the German AGBB.

To obtain excellent pigment deflocculation and stabilization, an additive with highly effective pigment affinic groups is required. These pigment affinic groups are aminic and able to react with epoxy resins. The ideal solution would be an additive with encapsulated aminic pigment affinic groups. However, creating such an additive was not possible using existing technologies.

With the introduction of DISPERBYK-2151 in 2011, BYK has developed an innovative additive which combines high effectivity with stability. The new DISPERBYK-2152 is a 100 % additive based on the same active substance. Thus, the mechanism of DISPERBYK-2152 is analogous to that of DISPERBYK-2151. The additive contains no solvents or volatile components and fulfills the strict requirements of the German AgBB as well as French VOC standards.

Benefits

- Excellent wetting and dispersing properties in epoxy systems and other reactive systems such as polyurethane, acrylics, and unsaturated polyesters
- 100 % active substance
- Fulfills the requirements of the German AgBB and French VOC regulations
- High molecular weight
- No negative effect on coating properties
- Significant viscosity reduction of mineral-filled plastic and adhesive systems
- Stabilization of various types of solid particles, especially:
 - Quartz
 - Aluminum oxide
 - Aluminum hydroxide
 - Calcium carbonate

Applications

Especially recommended for

- Industrial coatings
- Wood and furniture coatings
- Protective coatings
- Ambient curing systems
- Adhesives

Recommended for

• Automotive coatings

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ADDITIVES 21

Wetting and dispersing additives

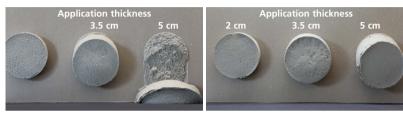
DISPERBYK-2290 •

VOC- and APEO-free powder wetting and dispersing agent for use with highly alkaline aqueous building materials

DISPERBYK-2290 is a highly efficient powder VOC- and siliconefree wetting and dispersing agent for use in predominantly sagcontroled, minerally based building material formulations. The additive is highly compatible with various different mineral binder systems. Due to its powder form, the additive is easy distributed in the building material formulation.

DISPERBYK-2290 accelerates and improves wetting of the powder components. Not only the consistency but also the rheological properties are retained throughout the processing time. The processing properties are improved by the homogeneous and robust texture.

DISPERBYK-2290 – Improved anti-sagging properties after application



0.05 % competitor

0.05 % DISPERBYK-2290

- Environmentally friendly
 - VOC-free, < 1500 ppm
 - APEO-free
- Accelerated and easier mixing
- A robust and homogeneous structure is achieved
- Workability properties are improved
- Consistency is maintained over a longer period of time
- No negative influence on setting behavior
- Stabilization of pigments and fillers

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ADDITIVES 23

Wetting and dispersing additives

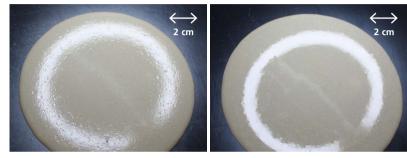
DISPERBYK-2291

VOC- and APEO-free powder wetting and dispersing agent for highly alkaline aqueous building material formulations

DISPERBYK-2291 is a highly efficient powder VOC- and siliconefree wetting and dispersing agent for use in predominantly flowable, minerally bound building material formulations. The additive is highly compatible with various different mineral binder systems. Due to its powder form, the additive is easy distributed in the building material formulation.

The additive accelerates and improves wetting of the fine-grain powder components in flowable systems without increasing the consistency during mixing. Furthermore, high density and an almost unchanging consistency are achieved throughout the processing time.

DISPERBYK-2291 – Excellent workability properties and surface characteristics in a ternary self-leveling compound



Competitor/30 min.

0.1 % DISPERRBYK-2291/30 min.

- Environmentally friendly
 - VOC-free, < 1500 ppm
 - APEO-free
- Accelerated and easier mixing
- A robust and homogeneous structure is achieved
- Leveling properties are optimized
- Consistency is maintained over a longer period of time
- No negative influence on setting behavior
- Stabilization of pigments and fillers

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ADDITIVES 25

Defoamers

BYK-1680 •

Construction material applications, in particular in combination with concrete additives based on polycarboxylate ethers.

BYK-1680 – Very good defoaming and leveling properties in a self-compacting concrete application

Reference BYK-1680 High-performance superplasticizers enable outstanding flow and workability properties in concrete applications. In the end system, however, the maximum possible strength properties cannot be achieved due to the foam-stabilizing effect of the superplasticizer, particularly in the case of PCE-based flow agents.

The use of defoamers is therefore mandatory in such formulations. Numerous suitable defoamers are incompatible and therefore, sooner or later, cause phase separation in the concrete additive. Over a longer period of time, many defoamers also tend to become ineffective in the end system.

In contrast to this, BYK-1680 is characterized by its excellent and sustained defoaming effect as well as its very good compatibility in aqueous polymer solutions and construction material formulations.

- Very good miscibility with water and PCE-based polymer solutions
- No turbidity or phase separation in concrete additives
- Long-term stability in concrete additives, even at elevated storage temperatures
- Very good spontaneous and controlled long-lasting defoaming effect
- Improvement to the flow behavior
- Post-addition to the end system possible without restrictions

ADDITIVES 27

Defoamers

BYK-1692 SD •

VOC- and silicone-free powder defoamer for aqueous mineral-bound building material formulations

BYK-1692 SD is a versatile, highly effective defoamer based on a combination of polymers and fatty acid derivatives. The combination of materials is formulated to work perfectly with one another for excellent defoaming results and compatibility with various dry mortar formulations. Especially recommended application areas include skim coats, jointing compounds and putties, leveling compounds (SLU/SLO) and screeds. The additive can also be used in tile adhesives, repair mortars, and hybrid systems (3-pack PU, 3-pack epoxy).

Defoaming effect of BYK-1692 SD in a skim coat formulation – backlit images



The additive is characterized by fast initial defoaming combined with long-lasting effectiveness in alkaline systems. This therefore ensures consistent surface and strength properties over the entire application window.

Benefits

- VOC < 1500 ppm
- Excellent defoaming performance over the entire application window
- Achieves optimum surface properties
- Versatile applications
- Free-flowing powder, easy to dose

Areas of application

- Skim coats
- Jointing compounds and putties
- Leveling compounds (SLU/SLO)
- Screeds
- Tile adhesives
- Repair mortars
- Hybrid systems (3-pack PU, 3-pack epoxy)

Defoamers

BYK-1693 SD •

Bio-based, powdered defoamer for aqueous 2-pack building material formulations.

Hybrid building material formulations usually consist of two components: the mineral-bound dry-mix mortar and an aqueous or powder dispersion. Mixing the two components creates a thixotropic flow behavior that stabilizes macrofoam and prevents the release of air voids. However, if these are too large or the amount is too high, this can lead to a reduction in density and can impair the application and mechanical properties, such as strength, and cause surface defects.

NEW

BYK-1693 SD is a new, very effective, powdered defoamer especially developed for hybrid systems based on mineral dry-mix mortars in combination with an aqueous or powder dispersion. The specific active ingredient combination of polymers and vegetable oils enables a strong and long-lasting defoaming performance over the entire processing time. The additive reduces the air void content and improves the properties of the fresh mortar as well as the physical properties of the hardened system. BYK-1693 SD is versatile and is particularly recommended for 2-pack waterproofing membranes.

Benefits

- Highly effective defoaming of hybrid systems
- Very good compatibility in different binder systems
- Strong and long-lasting defoaming performance
- Increased density of fresh mortar and the hardened system
- Increased flexural and compressive strength
- Optimum surface properties in the hardened system
- Easy dosage due to powder delivery form

Areas of application

- Waterproofing membranes (polymer cement mortar (PCM))
- Concrete repair mortar (polymer cement concrete (PCC))
- Jointing compounds and putties
- Tile adhesives
- Skim coats
- Leveling compounds (SLU/SLO)
- Screeds

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BYK-1748



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Defoamers



Silicone- and VOC-free, 100 % polymeric defoamer for epoxy resin-based, clear thick layer systems.

BYK-1748 – The ideal solution, even for very high layer thicknesses

3.5 cm



Without additive

With BYK-1748

Test system: Solvent-free, clear 2-pack epoxy resin coating **Additive dosage:** 0.1 % additive (as supplied) based on the total formulation

Thick layer systems, in particular solvent-free systems, require the use of highly effective additives. Ensuring good defoaming even at high film thicknesses requires powerful products that can cause turbidity in clear systems.

BYK-1748 is a new, silicone-free polymeric defoamer that has been specially developed for clear, high-build, and solvent-free 2-pack epoxy resin systems. Despite its particular efficiency, it does not cause turbidity or cratering. With the use of BYK-1748, excellent transparency can be achieved, even at very high film thicknesses.

BYK-1748 is a 100 % additive that largely consists of bio-based raw materials and is VOC- and APEO-free.

- Excellent defoaming of epoxy resin-based thick layer systems
- High transparency in clear applications
- Does not affect the surface properties
- High level of effectiveness, even at low dosage
- Very good storage stability
- Silicone-free
- 100 % active substance
- High proportion of bio-based raw materials
- VOC- (< 1500 ppm) and APEO-free
- Label-free

Defoamers

BYK-1754 BYK-1755

NEW

Polymer-based, silicone- and aromatic-free defoamer for solvent-borne printing inks and overprint varnishes.

BYK-1754 prevents foam formation in solvent-borne printing ink systems during production and filling. It also prevents air entrapment during processing. The additive displays a spontaneous foam-destroying effect and does not reduce the intercoat adhesion when recoating. Furthermore, BYK-1754 improves leveling.

BYK-1755 prevents foam formation in solvent-borne printing ink systems during production and filling. It prevents air entrapment during processing. The additive displays a spontaneous foam-destroying effect and does not reduce the intercoat adhesion when recoating.



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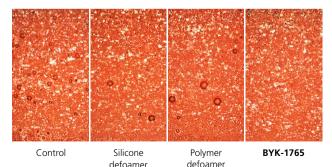
ADDITIVES 35

Defoamers BYK-1765

Solvent- and silicone-free defoamer for high-solid and solvent-free epoxy systems

The combination of high viscosity, low solvent content and high film thickness that can be seen in epoxy systems in protective and floor coatings, poses a particular challenge for the defoaming of such systems.

Microscope image of the coating cross section: Defoaming of the entire film



Test system: 2-pack high-solid epoxy primer Additive dosage: 1 % additive as supplied on component A Insufficient defoaming affects not only the optical properties, but also the functionality of coatings, e.g. corrosion resistance.

The polymer defoamer BYK-1765 was therefore especially developed for the special requirements in high-solid and solvent-free epoxy systems.

Benefits

- Excellent defoaming in high film thicknesses
- Improved surface appearance
- Silicone-, fluor- and solvent-free

Application

Especially recommended:

- Marine and protective coatings
- Floor coatings

Recommended:

- General industrial coatings
- Adhesives and sealants

Defoamers

BYK-1810/BYK-1811/ BYK-1815/BYK-1816/ BYK-1818

PFAS-free, silicone-containing defoamers for solvent-borne and solvent-free systems.

Per- and polyfluoroalkyl substances (PFAS) are widely used in everyday life as components of, for example, non-stick coatings, fire-fighting foams, or paints. However, since PFAS are now suspected of having the potential to be harmful to health, their use is being viewed increasingly critically worldwide.

Defoamers also often contain fluorine-modified silicones for a spontaneous and fast defoaming effect. BYK has expanded their portfolio and now offers PFAS-free sustainable alternatives to fluorine-modified silicone defoamers: BYK-1810, BYK-1811, BYK-1815, BYK-1816, and BYK-1818.

These five new additives provide high efficiency and excellent spontaneous defoaming on a par with PFAS-containing products, yet are completely fluorine-free. They can be used in a wide range of solvent-borne and solvent-free systems and cover a broad spectrum of applications overall.

Applications of PFAS-free defoamers

Applications	BYK-1810	ВҮК-1811	BYK-1815	BYK-1816	BYK-1818
	B∕	B	_₩	_₩	B
Architectural coatings		0	0	0	0
Floor coatings	•	0	0	0	0
General industrial coatings	•	0	•	•	0
Marine coatings	•	•	•	•	•
Protective coatings	•	•	•	•	•
Wood and furniture coatings				•	0
Automotive refinish coatings	0				
Adhesives and sealants	•	0	•		
Thermosets	0		0		
Highly recommended Recommended					

Benefits

PFAS-free!

- Excellent defoaming properties in solvent-borne and solvent-free systems (wide range of applications)
- Spontaneous defoaming even at low dosage levels
- Prevention of pinholes
- Reduction of surface tension
- Positive influence on leveling and surface appearance
- Good storage stability

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ADDITIVES 39

Defoamers

BYK-1851 BYK-1852



New polymer defoamers replace well-known standard products in solvent-borne and solvent-free systems

Markets are changing dynamically, and this also affects the procurement side. As an important raw material for the well-known polymer defoamers BYK-051 N, BYK-052 N, and BYK-053 N is no longer available, BYK has developed replacement products that are almost identical. They are based on the same chemistry as their predecessors and are equivalent in terms of application, but no longer contain aromatic solvents. This results in marginal changes in the technical data.

BYK-1851 and BYK-1852 replace well-known standard defoamers

вүк-051 N	>	ВҮК-1851
BYK-052 N	>	ВҮК-1852
BYK-053 N	>	BYK-1852

Both new defoamers are silicone-free and have a strong and spontaneous effect, although BYK-1851 is the slightly more compatible additive. BYK-1852, on the other hand, is more efficient and can therefore be used at an even lower dosage. It is suitable for medium- to non-polar systems. BYK-1851 and BYK-1852 do not reduce the intercoat adhesion when recoating.

Benefits

- Spontaneous and very efficient defoaming of a wide range of systems
- Silicone- and aromatic-free
- For good leveling and defect-free surfaces

Areas of application

- General industrial coatings
- Architectural coatings
- Wood and furniture coatings
- Automotive coatings
- Marine and protective coatings
- Floor coatings
- Printing inks and overprint varnishes

BYK-1856

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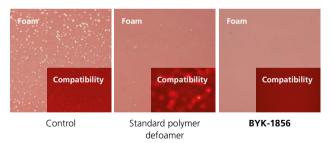
ADDITIVES 41

Defoamers

NEW

Silicone- and aromatic-free defoamer with excellent defoaming effect and exceptional compatibility for solventborne and solvent-free systems

BYK-1856 in a protective epoxy primer: Very good defoaming and outstanding compatibility



Test system: conventional 2-pack protective epoxy primer Additive dosage: 0.5 % (as supplied) based on the A component Application method:

- 1. Foam: pour out the epoxy primer onto PE foil after incorporating air by vigorously stirring
- 2. Compatibility: draw down of the epoxy primer on glass panel in a film thickness of 200 μm (wet) after stirring

In many applications, defoamers should be not only highly effective, but also highly compatible; something that initially appears to be contradictory. The new, silicone-free BYK-1856 defoamer has been developed based on acrylates and can achieve both effects at the same time. The defoamer is particularly suitable for systems requiring high compatibility and good defoaming. BYK-1856 is effective in 2-pack epoxyand 2-pack polyurethane-based coating applications as well as in many common thermoset systems based on epoxy resin, unsaturated polyester and vinylester resin, and acrylic syrups of a low molecular weight.

General benefits

- Silicone- and aromatic-free
- Powerful and spontaneous defoaming/air release effect
- Excellent compatibility
- Easy handling due to low viscosity

Specific benefits in coating applications

- Improves leveling
- Especially recommended for epoxy resin and polyurethane systems
- Highly suitable for increased film thicknesses

Surface additives

BYK-314/BYK-3765 BYK-3772/BYK-UV 3511

Cyclic siloxanes in siliconebased surface additives – Purified alternatives to additives with a higher cyclic siloxanes content

As of June 2018, silicone-based products containing 0.1 % or more D4, D5, or D6 cyclic siloxanes must be labeled as SVHC (Substance of Very High Concern) on the EU Safety Data Sheet.

BYK offers purified alternatives with a residual D4, D5, and D6 content of less than 0.1 % each to ensure safe use in any formulation.

What does "purified" mean?

By adding an additional production step after manufacturing, the D4, D5, and D6 cyclic siloxanes content is reduced to less than 0.1 % each.

Low cyclic alternatives to surface additives with a cyclic siloxanes content of 0.1 % or higher

Standard additives with a cyclic siloxanes content of ≥ 0.1%	Alternatives with a cyclic siloxanes content of < 0.1 %	
BYK-300*1	BYK-3750*1/BYK-3755*1	
BYK-301	BYK-3751	
ВҮК-302	BYK-3752	
BYK-306*1	BYK-3761*1/BYK-3765	
BYK-307	BYK-3762	
BYK-323	BYK-3780	
BYK-330	BYK-3763	
BYK-331	BYK-3753	
BYK-342	BYK-3754/BYK-3756	
BYK-370*1, 2	BYK-3772	
BYK-377	BYK-3771	
ВҮК-378	BYK-3764	
BYK-UV 3500	Technical alternative: BYK-UV 3505*2	
BYK-UV 3510	BYK-UV 3511	

*1 Aromatic solvent (BTX)

*² Contains organotin

Surface additives

BYK-379 0

Highly active silicone-containing surface additive with strong dynamic properties and minimal foam stabilization

In order to achieve excellent surface properties, such as good substrate wetting, surface slip, anti-crater properties, or scratch resistance in coatings and printing inks, BYK offers a number of highly active polyether-modified polydimethylsiloxanes that provide a strong reduction in static surface tension. In fast printing processes, spray applications, and in inkjet applications, the reduction of dynamic surface tension is also important.

The new silicone additive BYK-379 has therefore been especially developed for printing inks and inkjet inks to ensure these dynamic properties as well as to achieve the same surface effects as conventional highly active silicone additives. Due to the comb-like structure of the product, a reduction of static and dynamic surface tension is achieved at the same time.

The additive is universally usable in aqueous, solvent-borne, and radiation-curing coatings, printing inks, and inkjet inks and is broadly compatible. In addition, it hardly stabilizes foams and is very effective even at low dosages.

- Very strong reduction of dynamic surface tension
 - ightarrow Good wetting in fast printing processes
 - ightarrow Improved jetting in UV inkjet inks
 - ightarrow Excellent drop spread on the substrate in UV inkjet inks
- Very strong reduction of static surface tension
 - ightarrow Good substrate wetting
 - ightarrow Optimized anti-crater properties
 - ightarrow Increase of surface slip
 - ightarrow Improvement of scratch resistance
- No or only minimal foam stabilization
- 100% active substance
- Universally usable broadly compatible in aqueous, solvent-borne, and radiation-curing coatings, printing inks, and inkjet inks
- Cyclic siloxanes D4/D5/D6 content: each < 0.1 %
- Complies to the food contact regulations according to Swiss Ordinance and Nestlé Guidance Note*
- * This information is correct as of November 2022. The current status for all of the above can be found at https://www.byk.com/en/service/regulatory-affairs/food-contact



Benefits

- Excellent substrate wetting and leveling with one additive
- Strong reduction of surface tension
- Defoaming effect
- Anti-cratering properties and pinhole elimination
- Strong contamination resistance
- Universal and good compatibility: suitable for very low up to higher organic co-solvent content

Areas of application

- General industrial coatings
- Leather finishes and coated fabrics
- Printing inks
- Marine and protective coatings
- Architectural coatings
- Wood and furniture coatings
- Floor coatings
- Adhesives and sealants

Modern, multi-functional silicone surface additive for aqueous systems, especially with low co-solvent content.

The general trend in the industry is toward high-solid, solventfree, or aqueous systems. With aqueous systems, the industry faces major challenges that require strong and versatile additives. For example, the increasing use of low-polarity substrates requires additives that greatly reduce surface tension. In addition, the additives should offer very good anti-cratering and anti-contamination properties, as some resin systems and special applications require strong defoamers, which can cause side effects such as dewetting or cratering. Contamination by low-polarity liquid droplets or dust can also occur.

In order to cover all these requirements with only one product, BYK has developed another special additive that combines different functions such as wetting, leveling, and defoaming and at the same time is suitable for different aqueous systems from lower to higher polarity. BYK-3483 expands the range of applications of the BYK-3480 family by being particularly suitable for systems with a very low co-solvent content and offering a good balance between defoaming effect and excellent compatibility in various aqueous systems. It can also be used in solvent-free UV systems.

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ADDITIVES 49

Surface additives

BYK-UV 3590 BYK-UV 3595

Radiation-curing silicone-based surface additives

These two radiation-curing additives are particularly characterized by extremely strong tape release properties.

BYK-UV 3590 and BYK-UV 3595 are 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 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. BYK-UV 3595 improves flow and exhibits defoaming properties without affecting turbidity. By using BYK-UV 3590 and BYK-UV 3595, it is also possible to create structural effects in overprint varnishes and printing inks. BYK-UV 3590 and BYK-UV 3595 are particularly recommended for all non-aqueous, radiation-curing flexographic, offset and screen printing inks as well as for radiation-curing overprint varnishes.

The additives are colorless, odorless, essentially clear and characterized by a very low content of the cyclic siloxanes D4, D5 and D6 (each < 0.1 %).



Wax additives

AQUACER 1541

NEW

Carnauba wax emulsion to improve the surface properties of aqueous can coatings

Wax additives are commonly used in can coating systems to improve the surface properties of the coating, for example by reducing COF values and improving scratch and abrasion resistance. These wax additives can either be a dispersion in an organic solvent, an emulsion with water as carrier, or micronized. Wax dispersions affect the VOC content of the formulation due to the organic solvent they contain, which is undesirable in many aqueous coating systems. Furthermore, the use of biocides is not allowed in food contact applications.

AQUACER 1541 is a new wax emulsion based on carnauba wax that effectively lowers the COF value and significantly improves the scratch resistance of water-based can coatings. The additive is particularly suitable for aqueous systems with a low organic co-solvent content and does not have a negative impact on gloss and transparency. It complies with food contact regulations*, is biocide-free, and is made from biobased raw materials.

* Status December 2024. For information regarding the regulatory status according to food contact regulation please visit www.byk.com/en/service/ regulatory-affairs/food-contact or contact our BRIEF Team.

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AQUACER 1541 significantly

reduces the COF and increases the sheen hardness in water-based systems without introducing additional co-solvents into the formulation and without negatively affecting gloss or transparency.

- Reduced COF values
- Improved scratch resistance
- No negative impact on gloss or transparency
- Suitable for aqueous systems with a low co-solvent content
- Food contact compliant*
- Biocide-free
- From bio-based materials

Wax additives

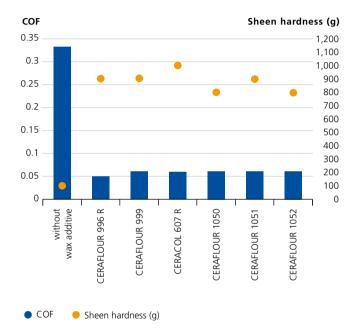
CERAFLOUR 1050 CERAFLOUR 1051 CERAFLOUR 1052

PTFE-free micronized wax additives for excellent abrasion and scratch resistance in aqueous, solvent-free, solvent-borne, and UV coating systems.

Polytetrafluoroethylene (PTFE) is a typical representative of perfluoroalkyl and polyfluoroalkyl (PFAS) substances. Its usage has been increasingly critically assessed at a global level for some time now, because products from this group of chemicals are suspected of being harmful to health. Nevertheless, PTFE possesses some desirable properties that harmless materials often do not have. In the field of wax additives, for example, conventional PTFE-based variants demonstrate outstanding abrasion and scratch resistance. For this reason, BYK has developed sustainable alternatives to PE/PTFE wax additives that are both safe to use and ensure excellent application results: CERAFLOUR 1050, CERAFLOUR 1051, and CERAFLOUR 1052. Their special composition gives these additives a comparable level of mechanical resistance, including abrasion and scratch resistance. Their fine particle size distribution also makes them ideal for use in clearcoats and systems with low film thicknesses. CERAFLOUR 1050, CERAFLOUR 1051, and CERAFLOUR 1052 can be used to achieve matting in aqueous cosolvent-containing systems. All three additives are food contact compliant.



Very good scratch resistance and surface slip in a BPA-free can coatings clearcoat



Test system: BPA-free polyester/melamine system Additive dosage: 1 % wax additive solid based on the total formulation COF: Coefficient of friction

Benefits



of CERAFLOUR 1050, 1051, and 1052:

- Significant improvement in abrasion and scratch resistance
- Medium to strong reduction in surface slip
- Very fine particle size distribution → also suitable for clearcoats and systems with low film thicknesses
- Food contact compliant

Additional benefits

- of CERAFLOUR 1050: Especially recommended for clearcoats and haze-sensitive systems
- of CERAFLOUR 1051: Good performance in a wide range of application areas
- of CERAFLOUR 1052: Ideal for systems that require less surface slip

Applications

- General industrial coatings
- Can coatings
- Coil coatings
- Wood and furniture coatings
- Architectural coatings

Rheology additives

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 mediumpolarity 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

Free of crystalline silica (quartz)

- 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)

Applications

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

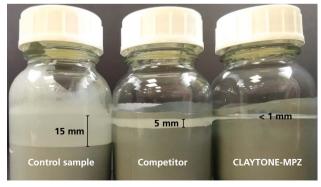
Rheology additives

CLAYTONE-MPZ

High-performance organoclay for medium to high-polar systems

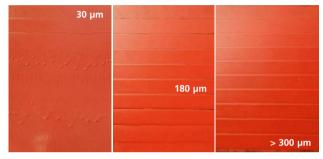
CLAYTONE-MPZ is especially suitable for applications with high requirements with regard to rheology. It has been specially processed to ensure maximum performance, which gives this organoclay an edge over the rest of the product portfolio.

Good settling behavior with CLAYTONE-MPZ in a zinc paste for ethyl silicate-based protective coating systems



Incorporated as an in-situ pre-gel, stored for 2 weeks at 50 °C

CLAYTONE-MPZ – High resistance to sagging in an epoxy resin mixture with high solid content or when incorporated as a pre-gel



 Control sample
 Competitor
 CLAYTONE-MPZ

 Test system: BPA epoxy resin mixture with high solid content (liquid/solid)
 Dosage: 10% additive supplied as a pre-gel, pre-gel dosage in a 10% formulation

General benefits

- Increase of low shear viscosity
- Prevents settling and sagging
- Thixotropic flow behavior
- No temperature activation necessary

Benefits of CLAYTONE-MPZ

- Maximum performance in medium to higher polar systems
- Excellent anti-settling properties and weldability for use in inorganic zinc rich ethyl silicate systems
- Minimal impact on gloss and haze

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ADDITIVES 61

Rheology additives

GARAMITE-7305



Powdered rheology additive for polar solvent-based and solvent-free systems to increase storage duration and sagging resistance

GARAMITE-7305 is a rheology additive that delivers advantages over conventional organophilic phyllosilicates (organoclays). Conventional phyllosilicates usually require high shear forces and polar activators to support dispersion during incorporation. In comparison, GARAMITE-7305 can be incorporated and activated very easily in solvents and binders using moderate shear forces. The additive features a strong pseudoplastic viscosity profile. The use of GARAMITE-7305 allows formulations with high viscosity to be achieved in the low shear range, resulting in excellent anti-settling features and antisyneresis properties. When shear forces are applied, a major reduction in viscosity takes place, which significantly improves the application properties.

Recommended use

GARAMITE-7305 is best suited for mid-polar to polar systems in the following applications:

ectural coatings	•
tive coatings	•
rial coatings	•
patings	Ο
er coatings	•

especially recommended
 recommended

#FC \$2025

Rheology additives

NEW LAPONITE-7007

Rheology additive for perfect orientation of effect pigments in aqueous coatings

In aqueous coatings, adjustment of the rheology profile is generally of the utmost importance. However, it is particularly essential in effect coatings, in which the rapid structure formation after shearing, for example in spray applications, enables perfect orientation of the pigments and thereby excellent flop values.

Solid synthetic phyllosilicates such as the LAPONITE product series are especially suitable for achieving this effect, but can be difficult to handle

The new LAPONITE-7007 is a special, user-friendly supplement to this product series and allows dispersions to be manufactured with a higher content of solid additive without impairing processability. In addition, LAPONITE-7007 is less sensitive to water quality and has longer storage stability as a dispersion. It is therefore particularly suitable for applications in which easy handling plays an important role, such as in refinish automotive coatings.

LAPONITE-7007: The best way to combine the unique rheological performance of the LAPONITE product series with easy processing.

Benefits

Easy handling

- Ideal for dispersions with a higher additive content (up to 5%)
- Dispersions have longer storage stability
- Less sensitive to water quality
- 100 % solid additive with a low-dusting characteristic

Excellent application result

- Very rapid recovery of viscosity after shearing for excellent orientation of effect pigments \rightarrow high flop values
- Significant anti-settling effect in aqueous pigment slurries

Applications

- Automotive OEM coatings
- Automotive refinish coatings
- General industrial coatings
- Wood and furniture coatings
- Architectural coatings

NEW

ADDITIVES 65

Rheology additives

OPTIBENT-7920 OPTIBENT-7925

Rheology additives in powder form for aqueous paste-like and cementitious construction formulations with no negative impact on hydration and setting behavior

Layered silicates are often organically treated (modified) to achieve a very high efficiency as rheology additives in construction formulations.

High levels of modification prevent end products from meeting regulatory requirements or current environmental standards. In addition, they often impact the physical and chemical processes in the construction formulations, such as hydration and setting behavior.

OPTIBENT-7920 and OPTIBENT-7925 are a new generation of activated layered silicates from BYK, which, due to a targeted selection of raw materials and a special manufacturing process, attain the desired high effectiveness and therefore require no, or only minor, modification.

General benefits

- Very pure, activated layered silicates
- Highly effective low dosage possible
- For creamy consistency combined with high sag resistance of the construction formulations → excellent workability behavior

Benefits of OPTIBENT-7920

- Unmodified \rightarrow no impact on hydration or setting behavior
- Very high degree of whiteness
- Suitable for formulations that meet the most stringent regulatory requirements
- Especially recommended for paste-like systems (dispersions)

Benefits of OPTIBENT-7925

- Mostly inorganic → minimal effect on hydration and setting behavior
- Improves wetting and adhesive properties of systems
- Suitable for formulations that meet stringent regulatory requirements
- Especially recommended for cementitious and alternative binder systems (hybrid cement, geopolymers, SCM)

Rheology additives

RHEOBYK-7601



VOC-, APEO-, and tin-free associative thickener (HEUR) for aqueous systems, to generate a highly pseudoplastic flow behavior.



RHEOBYK-7601 increases the viscosity in the low shear range and generates a highly pseudoplastic flow behavior. As a result, the sagging tendency and storage stability are significantly improved and good leveling is also achieved. When added to color pastes, the additive preserves the viscosity and increases the compatibility of the color pastes in the system. Due to its composition, RHEOBYK-7601 is very easy to incorporate, and it is not necessary to control the temperature or adjust the pH value. The balanced compatibility of the additive enables use in different coating systems and leads to good results particularly in low-VOC and VOC-free formulations. When combined with rheology additives that are effective in the high shear range, it enables optimal workability properties.

Recommended use

Architectural coatings	•
Marine and protective coatings	•
Wood and furniture coatings	0
General industrial coatings	0

especially recommended
 recommended

NEW

ADDITIVES 69

Rheology additives

RHEOBYK-7460 CA • RHEOBYK-7470 CA • RHEOBYK-D 7460 •

Lithium chloride-free liquid rheology additives for aqueous, solvent-based, and solvent-free systems.

Benefits

- For outstanding
 - Anti-sagging
 - Anti-settling
 - Storage stability

in various systems and a wide range of applications

- Lithium chloride-free → for the most stringent regulatory requirements
- Liquid easy to dose and handle

Regulatory requirements are increasing continuously, not only for new products but also for established ones. For example, it is expected that in the near future all products containing 0.3 % (within the EU) or 0.1 % (outside the EU) lithium chloride will have to be labeled as reprotoxic, i.e. will receive the H360F addition.

For many years, BYK has been proactively developing alternatives to the existing portfolio that also meet future regulatory requirements. As part of this initiative, three new urea-based liquid rheology additives have now been developed, which are variants of known thixotropic agents:

The lithium chloride-free variants work very similarly, but not completely identically.

Lithium chloride- containing additive	Lithium chloride- free variant	
RHEOBYK-7410 CA	RHEOBYK-7460 CA	For medium-polar solvent-based and -free systems
RHEOBYK-7420 CA	RHEOBYK-7470 CA	For aqueous and high-polar systems
RHEOBYK-D 410	RHEOBYK-D 7460	For medium-polar solvent-based and -free systems

By replacing the stabilizer, the new additives are lithium chloride-free. Like the existing products, they provide a strong thixotropic flow behavior and significantly reduce the sagging and settling tendency of the application systems.

Rheology additives

RHEOBYK-7691



Solid, non-dusting, biocide-, and VOC-free associative thickener (HEUR) for aqueous systems that generates a Newtonian flow behavior.

Recommended use

Emulsion paints and coatings that are based on acrylic, styrene acrylate, vinyl acetate, PU, and epoxy dispersions, as well as alkyd emulsions.

Architectural coatings	•
Wood and furniture coatings	•
General industrial coatings	•
Marine and protective coatings	•
Floor coatings	•

especially recommended
 recommended

RHEOBYK-7691 is suitable for use in highly polar and aqueous binder systems.

Special features and benefits

RHEOBYK-7691 increases the viscosity in the high shear range with an extremely low impact in the low shear range.

- Improvement of:
- Processability
- Leveling
- Storage stability
- Brush resistance
- Reduced spattering during application
- Achieves higher film thicknesses along with an excellent balance between flow and leveling
- No negative impact on gloss and color acceptance
- Supplied as solid flakes to prevent dust formation and to increase application safety
- No need to add biocides to the additive to avoid microbial infestation

Special pH value adjustment and temperature control during incorporation not required. Combination with rheology additives that are effective in the low shear range, such as RHEOBYK-7650, leads to optimized storage stability and processability.

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Rheology additives

RHEOBYK-D 420

Liquid rheology additive for aqueous systems to generate thixotropic flow behavior

RHEOBYK-7420 CA •

Liquid rheology additive to produce thixotropic flow behavior in aqueous and highly polar systems for improving anti-sagging and anti-settling properties

RHEOBYK-D 420 and RHEOBYK-7420 CA are preferably used as anti-settling additives to produce aqueous pigment, filler and matting agent concentrates. The additives excellent shear thinning effect is advantageous for dosing such concentrates because of their low viscosity. In addition, they are suitable for controlling the thixotropic flow behavior and for optimizing the anti-sagging properties and leveling. After being stirred into the coating system, the additives generate a three-dimensional network structure. The resulting thixotropic flow behavior is highly suited for preventing sedimentation and syneresis and increasing the antisagging properties without impairing leveling. The additives are liquid and therefore easy to handle. It is not necessary to specifically adjust the pH value or control the temperature during incorporation. **ADDITIVES**

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Technical data

RHEOBYK-D 420

- Active substance: 45 %
- Density (20 °C): 1.15 g/ml
- Solvents: Dimethyl sulfoxide
- Flash point: 95 °C

RHEOBYK-7420 CA

- Active substance: 52 %
- Density (20 °C): 1.08 g/cm³
- Solvents: Cyclic amide
- Flash point: 123 °C

INSTRUMENTS 75

BYK Instruments

measure the visible

and beyond.

The world is in a continuous change. The trends of 'globalization and standardization' within a more and more 'digital world' not only change consumer behavior but also your requirements for testing solutions:

Global communication

- Global specifications are prerequisite for seamless communication and ask for digital standard distribution.
- Excellent technical performance in compliance with international standards is a must.

Standardized QC management system

- Standardized QC procedures and QC reports need to be easy to set up globally.
- Routine QC checks and documentation are the key to product and process optimization.

Increase efficiency

• Innovative technologies are needed to guarantee objective and reliable measurement data.

Facts and figures instead of feelings!

Color quality control solutions for industrial paints and coatings

Industrial paints and coatings come in a variety of colors, textures and effects that enhance the appearance. In addition, the color of industrial paints and coatings not only affect the aesthetics but often has a very practical use. As many finished products consist of multiple components which are manufactured by different suppliers and at different locations, uniformity of color and appearance is crucial.

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Not only the paint batches need to be delivered with consistent quality, but also the production process of the finished product needs to be controlled. The "correct" color has to be ensured across different material types and gloss levels. Color tolerances are dependent on the application and the hue.





INSTRUMENTS

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#FCS2025

color2view and spectro2guide Perfect partner for global color management

- The only portable and benchtop spectrophotometer that combines color and gloss measurement with an integrated fluorimeter to control color harmony and to analyze long-term color stability based on fluorescence.
- Thanks to the powerful LED Technology and many years of experience, an outstanding technical performance is guaranteed. The superior accuracy and excellent Inter-Instrument-Agreement allow use of digital standards.
- Furthermore, for the first time in the industry, digital standards can be exchanged between portable and benchtop spectrophotometers. The excellent extra-instrument agreement between spectro2guide and color2view has made the seamless use of digital standards a reality without additional profiling.

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O BYK

NEW

Color quality control solutions for your specific task

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Short description	spectro2guide Pro	spectro2guide		spectro2go		spectro2go XS	color2go	
Catalog Nr.	7087	7070	7075	7085	7086	7095	7635	7630
Color geometry	45°c:0°	d:8° (spin/spex)	45°c:0°	d:8° (spin/spex)	45°c:0°	d:8° (spin/spex)	d:8° (spin/spex)	45°c:0°
Measuring capability	Color Gloss Fluorescence Jetness	Color Gloss Fluorescence		Color Gloss		Color	Color Gloss	
Sample port	12 mm		12 1	12 mm		12 mm		
Measuring area	8 mm		8 mm		4 mm	8 mm		
Repeatability color	0.01 ∆E94 (10 consecutive measurements on white)			(10 consecu	0.01 ΔE94 (10 consecutive measurements on white)			ΔΕ94
Reproducibility color	0.11 ΔΕ94 (average of 12 BCRA II tiles)			0.11 ΔΕ94 (average of 12 BCRA II tiles)			0.30	ΔΕ94
Digital standards	yes			yes			no	

Viscosity measurement with high efficiency



References

- ISO 2884 Determination of viscosity using rotary viscometers operated at a specified speed
- ASTM D4287 Standard test method for high-shear viscosity using a cone/plate viscometer
- ASTM D7395 Standard test method for cone/plate viscosity at a 500 s⁻¹ shear rate



The flow behavior of a liquid coating is crucial as it significantly influences its handling and application properties. Viscosity is a key factor in describing this flow behavior. However, the viscosity is not constant for most coating systems, it depends on the temperature as well as the coating's response to mechanical stress.

This applied stress is described as the shear rate and to correctly control and predict the flow behavior it needs to be applied to the coating in a controlled and even fashion.

byko-visc CP Rotate and flow through thick and thin

- Cone and plate viscometer that allows for absolute viscosity determination
- Constant shear rates throughout the sample
- Built-in temperature control
- Small sample sizes save time and material
- Switch cones without the need for recalibration
- Effortlessly switch between low and high shear applications

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INSTRUMENTS 83

Innovative color formulation software for solid and effect paints

Color matching challenges turn into accurate hits

NEW



Whether it's finding the ideal color for a new vehicle model, repairing a damaged car finish or optimizing a furniture coating – a uniform and consistent color is key for the perception of product quality!

Even slight deviations can be noticeable and lead to costly rework. Therefore, precise color matching is essential to ensure high-quality standards and meet customer expectations. However, the increasing use of effect pigments and multi-layer effect paints have made color matching even more complex, as their color changes with viewing angle and lighting conditions.

That's why digital tools have become an essential part of the color matching process. By combining multi-angle spectrophotometers with advanced software, even effect finishes can now be matched fast, precisely and consistently.

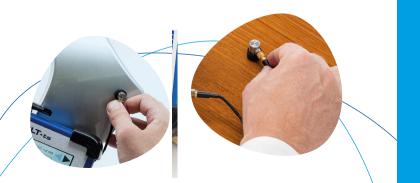
BYK-match Simplifies the complexity of color matching

- Advanced search, correction and formulation from scratch capabilities
- Color matching of solid, effect and multi-layer effect finishes
- Utilizing BYK-mac i color, sparkle and graininess data
- Al-driven pigment selection to find the right pigment combination
- Matching score for easy evaluation of color & effect match quality
- Cloud-based platform which is always up-to-date

Multi-layer film thickness measurement for any substrate

Film thickness variation has a significant impact on paint durability, color and appearance harmony. Accurate monitoring will avoid excess material usage. Multi-layer systems could only be measured accurately using destructive methods combined with a high-cost microscope which is very time consuming and requires expert knowledge. The BYK-PELT family is the solution for non-destructive multi-layer film thickness measurement with highest precision – available as a handheld measurement tool or an automated version to mount on a robot for process control.

A game changer in your quality control that saves time and money while giving you accuracy and valuable data for optimization you didn't have before.





BYK-PELT Accurate echoes from layer to layer

- Non-destructive measurement of multi-layer systems on any substrate material.
- Reports individual layer thickness and total thickness at each measurement location.
- Compact and lightweight with color touch-screen display.
- smart-chart software for professional documentation and data analysis with SPC charts.
- Innovative transducer technology for a wide thickness range:
 - Low frequency transducers for thick layers up to 5 mm
 - Medium frequency transducers for layers 18–500 μ m
 - High frequency transducers for thin layers down to 5 μ m

BYK LIVE

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Technical presentations

March, 25	ECC	Dr. Alexander Gers-Berlag	PFAS-free additives for a more sustainable world
March, 25 10 am	Hall 3A, Booth 124	Simon Ruhl	No more viscosity drop: Stable rheology and excellent colorant acceptance with a new PU thickener
March, 25 11 am	Hall 3A, Booth 124	Tanja Berning, Thomas Czeczatka	Simply change: Create PFAS- free solutions
March, 25 2 pm	Hall 3A, Booth 124	Claudia Bramlage	High-throughput screening: 24/7 for customer needs
March, 25 3 pm	Hall 3A, Booth 124	Mark Heekeren	The special agent: Easy-to-use additive for perfect metallic orientation
March, 25 4 pm	Hall 3A, Booth 124	Gabi Kigle-Böckler	New innovations in ultrasound technology for multi-layer film thickness measurement

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Weltklasse

March, 26 10 am	Hall 3A, Booth 124	Niklas Kircher	Drop by drop: How additives improve the efficiency of UV curing inkjet inks
March, 26 11 am	Hall 3A, Booth 124	Sebastian Nettinger	Release the air: New bio- based defoamer composition for aqueous hybrid construction formulations
March, 26 2 pm	Hall 3A, Booth 124	Kevin Spittka	Performance re(de)fined: Advanced crystalline silica-free organoclay
March, 26 3 pm	Hall 3A, Booth 124	Tanja Berning, Judith Ewald	Simply change: Create PFAS-free solutions
March, 26 4 pm	Hall 3A, Booth 124	Vera Leonhard	On the ground: Transparency for high-build epoxy coatings without foaming issues
March, 26 4.30 pm	Hall 3A, Booth 124	Klaus Wimmer	Color matching for effect and solid colors: How digital tools make the difference
March, 27 10 am	Hall 3A, Booth 124	Philipp Teriete	Multi-talent for challenging substrates: New defoaming surfactant for water-based systems
March, 27 11 am	Hall 3A, Booth 124	Claudia Bramlage	High-throughput screening: 24/7 for customer needs

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BYK INSIDE 89



BYK INSIDE

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More than 2.600employees around the world Investment in R&D < times higher than the industry average 150

years of **expertise**

90 BYK INSIDE

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BYK INSIDE 91

What do we mean by...

...innovation?

Continually offering the most modern and advanced additives. To do this, we invest about 8 percent of our annual turnover in research and development – 3 times more than most in the sector. Research and development and application technology staff make up 22 % of our workforce.

...expertise?

We host more than 40 customer seminars annually, sharing valuable know-how and insights into product solutions and application techniques.

byk.com





...closeness?

Our global footprint and end-use structure enable us to deliver regional, tailor-made solutions to our customers with specialized industry and application focus.

Introduction

5 - Defoamers and Air Release Agents

Welcome to the interactive world of BYK additives. This multimedia brochure on "Defnamare and "Defnamare" and "D

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Defoamers and Air Release Agents

Welcome to the interactive world of BYK additives

Our multimedia ebooks support your work with interactive graphics, fascinating animations, and videos to illustrate chemical processes.



byk.com/ebooks

Contents D

....

BYK highlights

Automotive coatings





Construction chemicals



Wood and furniture coatings



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BYK: world's largest and most versatile flexshuttle facility

- Significant time-to-market advantage for customers
- BYK doubles capacity in application technology

Would you like to learn more?

Feel free to talk to our HTS experts here on site at the ECS

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#ECS2025



Do you know BYK's solutions and products for sustainability?

What does sustainability mean at BYK? Sustainability is of high value at BYK and has many facets. The search for alternative raw materials, the reorientation of research and development towards more sustainable products, sustainability in the applications of our customers, and the safest possible recycling in the sense of the circular economy are also among our most important topics. We integrate the three dimensions of ecology, economy, and social commitment into all decision-making processes at BYK.

Unfortunately, we cannot be THE solution to climate change – but we can be part of the solution. With our sustainable solutions, we want to create value – not only for our customers, but also for our environment, our employees and future generations.



Discover byk.com/sustainability

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