



Technical Information B-RI 11

# **OPTIBENT**

Phyllosilicates for Dry Mix Building Product

# **Products and Applications**

# OPTIBENT Additives for the efficient and consistent control of plasters, mortars, screeds and adhesives.

# **Plasters and Mortars:**

- Increased sag control
- Improved workability
- Easier to pump
- Reduced sticking
- No impact on cement hydration

# **Tile Adhesives:**

- Longer open times
- Increased sag resistance
- No negative impact on cement hydration

# Screeds/self-leveling Compounds:

- Decreased sedimentation
- Improved flow
- Homogenous structure

# **Stucco/EIFS Adhesives:**

- Improved handling
- Longer open times

Dry/mix Mortars Plaster/anhydrite-based Systems Drywall mounts Plasters/light-weight plasters Thin-set plaster Screeds Spackling compounds  Lime-cement-based Systems Lime-cement renders Light-weight lime-cement renders  Cement-based Systems Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	•	541		940	86	1008	1056	1248	6042	MM	MA	XX	WA	OPTIBENT NT10*
Plaster/anhydrite-based Systems  Drywall mounts  Plasters/light-weight plasters  Thin-set plaster  Screeds  Spackling compounds  Lime-cement-based Systems  Lime-cement renders  Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds  Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds  Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks	•	_					+							
Plaster/anhydrite-based Systems  Drywall mounts  Plasters/light-weight plasters  Thin-set plaster  Screeds  Spackling compounds  Lime-cement-based Systems  Lime-cement renders  Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds  Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds  Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks	•	_		•			+							
Drywall mounts Plasters/light-weight plasters Thin-set plaster Screeds Spackling compounds  Lime-cement-based Systems Lime-cement renders Light-weight lime-cement renders  Cement-based Systems Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	•	_					+							
Plasters/light-weight plasters Thin-set plaster Screeds Spackling compounds  Lime-cement-based Systems Lime-cement renders Light-weight lime-cement renders  Cement-based Systems Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	•	_					+							
Thin-set plaster  Screeds  Spackling compounds  Lime-cement-based Systems Lime-cement renders  Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds  Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds  Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks	•	_					+							
Screeds Spackling compounds  Lime-cement-based Systems Lime-cement renders Light-weight lime-cement renders  Cement-based Systems Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	•	_					+							
Lime-cement-based Systems Lime-cement renders Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks		_					+							
Lime-cement renders Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks		_					+							
Lime-cement renders Light-weight lime-cement renders  Cement-based Systems  Self-leveling compounds Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks		_					+							
Cement-based Systems  Self-leveling compounds  Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds  Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks		_					+							
Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks		_					+							
Self-leveling compounds Reinforcement mortars Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks		_					+					$\overline{}$		
Reinforcement mortars  Concrete restoration  Water-proofing slurries  Screeds  Tile adhesives (cement-based)  Grout/joint compounds  Stucco  Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks		_					+				+			
Concrete restoration Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks			•				+	Ľ				+		
Water-proofing slurries Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks			_									+	+	+-
Screeds Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	_				_							+	+	
Tile adhesives (cement-based) Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks	_	1										+	+	+=
Grout/joint compounds Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks					Ħ							+	+	+-
Stucco Light-weight renders Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks				<del>  -</del>			+=		+	+		+	+-	
Light-weight renders  Masonry mortars/light-weight masonry m.  Adhesives for concrete precision blocks												+	+	
Masonry mortars/light-weight masonry m. Adhesives for concrete precision blocks												+	+	
Adhesives for concrete precision blocks												+	+	+
												+	+	+
Repair mortars												+	+	+
Restoration renders												+	+	+
Sub-plasters Sub-plasters												+	+	1
Block fillers														
EIFS/adhesives/reinforcement mortars												1	1	1
		-												1
Synthetic resin plasters/latex plasters														
Silicon resin plasters														
Silicate plasters														
Miscellaneous Applications														
Latex tile adhesives												Т		Т
Latex spackling compounds		+	<del>                                     </del>	<del>                                     </del>		+	+	+		+	+-	+	+-	+-

<sup>\*)</sup> A separate OPTIBENT NT10 brochure is available on request.

especially recommended

☐ recommended

# **OPTIBENT – Product Overview**

OPTIBENT products – rheological additives based on laminar silicates – have been specially developed to meet the demands of dry-mix mortars and paste systems. These products make it

possible to influence and control such specific properties such as viscosity, yield point (stability), and workability. We offer products for a variety of uses and applications: OPTIBENT products are suitable for use in all mineral-based systems such as adhesives, reinforcement mortars, plasters and screeds. For latex-based systems, we also recommend our OPTIGEL series.

OPTIBENT MF	Standard product, low viscosity; specially suited for screeds (cement or gypsum-based); excellent stability with cement
OPTIBENT 541	Wall plasters and reinforcement mortars; increases open time in systems based on white cement; disperses well
OPTIBENT 602	Standard product for mineral-based tile adhesives and renders; Content of water retention aid may be reduced, increases sag resistance Gypsum-based plasters; improved smoothness, compensates for variations in plaster quality
OPTIBENT 940	Smoothing mortars and self-leveling compounds; excellent flow characteristics and anti-settling properties
OPTIBENT 987	Grout and spackling compounds, latex tile adhesives; can be used as an anti-settling agent in anhydrite screeds in order to reduce syneresis
OPTIBENT 1008	Basecoat plasters, EIFS adhesives; excellent stability and superior workability
OPTIBENT 1056	Tile adhesives, adhesives for concrete precision blocks, repair mortars; excellent stability and workability
OPTIBENT 1248	Stucco, EIFS adhesives/reinforcement mortars; excellent workability, increased open times
OPTIBENT 6018	Putties, jointing compounds and ready-to-use systems; extremely fine and whitish Pyllosilicate to optimize the sieve contribution; positive effect on workability and anti-sagging performance
OPTIBENT 6042	Tile adhesives; excellent workabilitiy, increased open time
OPTIGEL Series	Latex-based tile adhesives, spackling compounds, spray plasters OPTIGEL WM: High degree of thickening, increased water retention OPTIGEL WX: High yield point OPTIGEL LX: Excellent thickening properties and water retention OPTIGEL WA: High degree of thickening, excellent workability and stability
LAPONITE SL25	Excellent thixotropic and thickening properties, excellent workability and stability, easy to incorporate (ready-to-use solution)
OPTIBENT NT10	Phyllosilicate for water and stain restistance. Information available upon request.





# **Products and Applications**

### **BYK Additives**

#### **Product Range Additives:**

- Additives to improve surface slip, leveling, and substrate wetting
- Adhesion promoters
- Defoamers and air release agents
- Processing additives
- Rheological additives
- UV absorbers
- Viscosity depressants
- Wax additives
- Wetting and dispersing additives for pigments and extenders

### **BYK-Chemie GmbH**

P.O. Box 10 02 45 46462 Wesel Germany Tel +49 281 670-0 Fax +49 281 65735

info@byk.com www.byk.com/additives

## **Application Areas:**

#### **Coatings Industry**

- Architectural Coatings
- Automotive Coatings
- Industrial Coatings
- Can Coatings
- Coil Coatings
- Wood & Furniture Coatings
- Powder Coatings
- Leather Finishes
- Protective & Marine Coatings

### **Plastics Industry**

- Ambient Curing Systems
- PVC Plastisols
- SMC/BMC
- Thermoplastics

## **Printing Ink Industry**

- Flexo Inks
- Gravure Inks
- Inkjet Inks
- Silk Screen Inks
- Offset Inks
- Overprint Varnishes

## **Paper Coatings**

- Impregnation
- Coatings

### **Adhesives & Sealants**

#### **Construction Chemicals**

#### **Pigment Concentrates**

Raw Materials for Manufacturing Release Agents

# **BYK Instruments**

BYK offers a complete line of testing instruments to meet your needs in many application areas:

- Gloss/Appearance
- Color

Portable or stationary laboratory equipment – including easy-to-use quality control software.

BYK instruments – the complete solution for the coatings and plastics industry.

### **BYK-Gardner GmbH**

P.O. Box 970 82534 Geretsried Germany Tel +49 8171 3493-0 +49 800 427-3637 Fax +49 8171 3493-140

info.byk.gardner@altana.com www.byk.com/instruments

ACTAL®, ADJUST-4®, ADVITROL®, BENTOLITE®, CLAYTONE®, CLOISITE®, COPISIL®, FULACOLOR®, FULCAT®, FULGEL®, FULMONT®, GARAMITE®, GELWHITE®, LAPONITE®, MINERAL COLLOID®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PERMONT®, PURE THIX®, RHEOCIN®, RHEOTIX®, RIC-SYN®, SCP®, TIXOGEL®, Y25® are registered trademarks of BYK Additives.

ANTI-TERRA®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, DISPERBYK®, DISPERBYK®, LACTIMON®, NANOBYK®, PAPERBYK®, SILBYK®, VISCOBYK®, and Greenability® are registered trademarks of BYK-Chemie. AQUACER®, AQUAMAT®, AQUATIX®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, HORDAMER®, and MINERPOL® are registered trademarks of BYK-Cera.

SCONA® is a registered trademark of BYK Kometra.

This information is given to the best of our knowledge. Because of the multitude of formulations, production, and application conditions, all the above-mentioned statements have to be adjusted to the circumstances of the processor. No liabilities, including those for patent rights, can be derived from this fact for individual cases.

This issue replaces all previous versions – Printed in Germany

