

## PRODUCT GUIDE

ADDITIVES FOR AQUEOUS LEATHER FINISHES

**AND COATED FABRICS** 

SURFACE ADDITIVES

WETTING AND DISPERSING ADDITIVES

**DEFOAMERS** 

RHEOLOGY ADDITIVES

# **Surface additives (1/3)**

Product	Substrate wetting, anti-cratering Leveling	Slip increase   Pull-up	Anti-blocking	Soft-feel, touch	Gloss increase	Matting	Scratch resistance	Abrasion resistance	Water repellency	Slowed skin Tormation   Surface energy increase	For PUD polymerization processes	Active substance/ non- volatile matter (%)*1	Chemistry/wax base	Emulsifier	Melting point (wax component) in °C	pH value	Carrier/solvent
Wax-based																	
AQUACER 497		0	0	_	_	_			•			50	Paraffin wax	Non-ionic	60	5.5	Water
AQUACER 517		0			0		•	0				35	Oxidized HDPE wax	Non-ionic	120	9	Water
AQUACER 531				_	0		•	0				45	Modified PE wax	Non-ionic	130	3.5	Water
AQUACER 533		0	•		_				0			40	Modified paraffin wax	Anionic	95	9.5	Water
AQUACER 539		0	•			_	0		•			35	Modified paraffin wax	Non-ionic	90	9.5	Water
AQUACER 552				_	0	_	•	0				35	Oxidized HDPE wax	Non-ionic	130	9	Water
AQUACER 570*2		0			•		•	0				40	Sunflower/carnauba wax blend	Non-ionic	85	5	Water
AQUACER 2650*2		0	•				0		•			30	Carnauba wax	Non-ionic	85	4.5	Water
AQUAMAT 208				•	_	•	•	•				35	Oxidized HDPE wax		135	8.5	Water
AQUAMAT 263				•	_	•	•	•				35	Oxidized HDPE wax		130	9.5	Water/propylene glycol n-butyl ether 12/1
AQUAMAT 272 N		0		•	_	•	•	•				55	Modified PE wax		125	4	Water
CERAFLOUR 920				•	_	•	•					100	Urea-aldehyde resin				
CERAFLOUR 927 N				_	_	•	•	•				100	Micronized, modified HDPE wax		125		
CERAFLOUR 929 N				•	_	•	•	•				100	Micronized, modified PE wax		115		

Especially recommendedRecommended

<sup>\*1</sup> The active substance content does not necessarily correspond to the non-volatile matter content. Depending on the composition of the product and the analytical method of determination, the non-volatile matter content can be higher or lower. The active substance content serves as the basis for calculating the dosage.

<sup>\*2</sup> From bio-based raw materials

<sup>\*3</sup> The given recommendations apply only when the additive is used in PUD polymerization processes.

# **Surface additives (2/3)**

Product	Substrate wetting, anti-cratering	Clin increase	Pull-in	Anti-blocking	Soft-feel, touch	Gloss increase	Matting	Scratch resistance	Abrasion resistance	Water repellency	Slowed skin formation	Surface energy increase	For PUD polymerization processes	Active substance/ non- volatile matter (%)*1	Chemistry/wax base	Emulsifier	Melting point (wax component) in °C	pH value	Carrier/solvent
CERAFLOUR 988			•								Ξ	Ξ		100	Micronized, amide-modified polyethylene wax		140		
CERAFLOUR 1000*2					•		•	0	0					100	Polyester		175		
CERAFLOUR 1001*2					•		•	0	0					100	Micronized, modified biopolymer		175		
Silicone-based																			
BYK-307	• (			0	0							_		100	Polyether-modified polydimethylsiloxane				
BYK-333	0 0			•	•			_	_	_	_	_		100	Polyether-modified polydimethylsiloxane				
BYK-346	•			_								_		52	Polyether-modified polydimethylsiloxane				Dipropylene glycol monomethyl ether
BYK-348	•							_		_	_	_		100	Polyether-modified siloxane				
BYK-349	•				_	_	_	_		_		_		100	Polyether-modified siloxane		·		
BYK-378	0 0			•	•									100	Polyether-modified polydimethylsiloxane		-		
BYK-3455	•							_	_	_	_	_		>90	Polyether-modified polydimethylsiloxane				-
BYK-3560						_	_	_		_	_	•	_	100	Polyether macromer-modified polyacrylate		-		-
BYK-3565		)		_								•		>97	Silicone and polyether macromer-modified polyacrylate				
BYK-3566		)						_		_	_	•		>97	Silicone and polyether macromer-modified polyacrylate				

Especially recommended
Recommended

<sup>\*1</sup> The active substance content does not necessarily correspond to the non-volatile matter content. Depending on the composition of the product and the analytical method of determination, the non-volatile matter content can be higher or lower. The active substance content serves as the basis for calculating the dosage.

<sup>\*2</sup> From bio-based raw materials

<sup>\*3</sup> The given recommendations apply only when the additive is used in PUD polymerization processes.

# **Surface additives (3/3)**

Product	Substrate wetting, anti-cratering Leveling	Pull-up Anti-blocking	Soft-feel, touch	Gloss increase Matting	Scratch resistance	Abrasion resistance	Water repellency	Surface energy increase	mylod	Active substance/ non- volatile matter (%)*1	Chemistry/wax base	Emulsifier	Melting point (wax component) in °C	pH value	Carrier/solvent
BYK-3760	• • •	•	•							>99	Polyether-modified polydimethylsiloxane				
BYK-L 9565*3	•		•			•			•	100	Polyether-modified polydimethylsiloxane, hydroxy-functional				
BYK-L 9568*3			•			•			•	>97	Polyether-modified polydimethylsiloxane, hydroxy-functional				
BYK-L 9575	•	•	•		•	•				60	Emulsion of a high molecular weight polydimethylsiloxane				Water
BYK-SILCLEAN 3720	0	0			_		•			25	Solution of polyether-modified, hydroxy-functional polydimethylsiloxane				Methoxypropanol
Silicone-free															
BYKETOL-AQ	0 0		_		_	_				4	Combination of surface-active, low molecular weight polymers				Methoxypropanol
BYKETOL-PC			_		_					90	Preparation of modified urea				Water

<sup>●</sup> Especially recommended ○ Recommended

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<sup>\*2</sup> From bio-based raw materials

<sup>\*3</sup> The given recommendations apply only when the additive is used in PUD polymerization processes.

### **Defoamers**

Product	Clear finish	Pigmented finish	Pigment concentrates	Active substance/ non-volatile matter (%)*4	Chemistry	Carrier/solvent
Mineral oil based						
BYK-035	•	•		100	Mixture of paraffinic mineral oils and hydrophobic components. Contains silicone.	
Silicone-based						
BYK-017			•	>98	Compound of foam-destroying polysiloxanes and hydrophobic solids	
BYK-019	•	•		60	Solution of a polyether-modified polydimethylsiloxane	Dipropylene glycol monomethyl ether
BYK-021	•	•		100	Mixture of foam-destroying polysiloxanes and hydrophobic solids in polyglycol	Polyglycol
BYK-024	•	•		100	Mixture of foam-destroying polysiloxanes and hydrophobic solids in polyglycol	Polyglycol
BYK-093	•	•		100	Mixture of foam-destroying polysiloxanes and hydrophobic solids in polyglycol	Polyglycol
BYK-094	•	•		100	Compound of foam-destroying polysiloxanes and hydrophobic solids	
BYK-1610	0	•	0	17	Emulsion of hydrophobic solids, emulsifiers, and foam-destroying polysiloxanes	Water
BYK-1615	•	•		12.5	Emulsion of hydrophobic solids, emulsifiers, and foam-destroying polysiloxanes	Water
BYK-1781	•	•		100	Polyether-modified polydimethylsiloxane with hydrophobic particles	
Polymer-based, silicon	e-free					
BYK-014*5	•	•		100	Polyether with hydrophobic particles	
BYK-1711	•	•	-	100	Solution of polyolefin with hydrophobic particles	
BYK-1740*5	•	•		100	Blend of hydrophobic solids and foam-destroying fat derivatives	

<sup>●</sup> Especially recommended ○ Recommended

<sup>\*4</sup> The active substance content does not necessarily correspond to the non-volatile matter content. Depending on the composition of the product and the analytical method of determination, the non-volatile matter content can be higher or lower. The active substance content serves as the basis for calculating the dosage.

<sup>\*5</sup> From bio-based raw materials

# **Rheology additives (1/2)**

Product				Inc	orpor	ation	Visc	osity ease a	nt	Resu			Associative thickener	Active substance/	Chemistry/wax base	Emulsifier	Melting point (wax component)	pH value	Carrier/solvent
	Clear finish		Pigment concentrates	Post-addition	With high shear	Premix in water	Low shear rates	Medium shear rates (KU)	High shear rates (ICI)	Pseudoplastic	Thixotropic	Newtonian		volatile matter (%)*8			in °C		
AQUATIX 8421	•	•		•			•		_		•			20	Modified EVA wax	Non-ionic	105	5.5	Water
RHEOBYK-420		0	•	•	0		•				•			52	Modified urea				N-Methylpyrrolidone
RHEOBYK-425	•	•	•	•			•	0		•			•	50	Urea-modified polyurethane				Polypropylene glycol
RHEOBYK-7420 ET		0	•	•	0		•				•			42	Solution of a modified urea				Amide ether
Polyurethane thickeners/ass	ociati	ve th	ickeı	ners															
RHEOBYK-7610	•	•	•	•			•		_	•			•	20	Solution of a polyurethane				Water
RHEOBYK-H 3300 VF	•	•	0	•			•	0		•			•	17.5	Solution of a polyurethane			8 ± 1	Water
RHEOBYK-H 7500 VF	•	•	0	•			•			•			•	17.5	Solution of a polyurethane			8 ± 1	Water
RHEOBYK-H 7625 VF	•	•	•	•			•	0		•			•	20	Solution of a polyurethane				Water
RHEOBYK-L 1400 VF	•	•	0	•					•			•	•	20	Solution of a polyurethane			_	Water
RHEOBYK-M 2600 VF	•	•	•	•				•		•			•	20	Solution of a polyurethane	<del></del> -	<del>-</del> -	8 ± 1	Water
RHEOBYK-T 1000 VF	•	•	0	•					•			•	•	22.5	Solution of a polyurethane				Water
RHEOBYK-T 1010 VF	•	•	•	•					•			•	•	22.5	Solution of a polyurethane				Water

<sup>●</sup> Especially recommended ○ Recommended

<sup>\*8</sup> The active substance content does not necessarily correspond to the non-volatile matter content. Depending on the composition of the product and the analytical method of determination, the non-volatile matter content can be higher or lower. The active substance content serves as the basis for calculating the dosage.

<sup>\*9</sup> Especially for systems with cosolvent and low and high pH values

# **Rheology additives (2/2)**

Product				Inc	orpoi	ation		osity ease a	ıt	Resu flow	ılting beha	vior	Associative thickener	Active substance/	Chemistry/wax base	Emulsifier	Melting point (wax component)	pH value	Carrier/solvent
	Clear finish	Pigmented finish	Pigment concentrates		With high shear	Premix in water	Low shear rates	Medium shear rates (KU)	High shear rates (ICI)	Pseudoplastic	Thixotropic	Newtonian		volatile matter (%)*8	volatile natter		in °C		
Synthetic phyllosilicates																			
LAPONITE-EP*9	•	•	•			•	•		_	0	•			100	Organically modified synthetic phyllosilicate				
LAPONITE-RD	•	•	•			•	•			0	•			100	Modified synthetic phyllosilicate				-
LAPONITE-RDS	•	•	•			•	•			0	•			100	Modified synthetic phyllosilicate				
LAPONITE-S 482	0	0	•	_	0	•	•			0	•			100	Modified synthetic phyllosilicate	<del></del>			- ·
LAPONITE-SL 25	0	0	•	•			•			0	•			21.5–25	Modified synthetic phyllosilicate				Water
Activated phyllosilicates																			
OPTIGEL-CK	0	•			•	•		•			•			100	Activated phyllosilicate				
OPTIGEL-WX	0	•			•	•		•		•	0			100	Activated phyllosilicate		-	_	

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<sup>\*9</sup> Especially for systems with cosolvent and low and high pH values

## Wetting and dispersing additives (1/2)

Product	Organic pigments, carbon blacks	Inorganic pigments	Effect pigments	Matting agents	Grinding without resin	Grinding with resin	Active substance/ non- volatile matter (%)*10	Chemistry	Carrier/solvent
Controlled flocculating									
ANTI-TERRA-250		•		0	•	•	70	Solution of an alkylol ammonium salt of a higher molecular weight acidic polymer	Water
Deflocculating									
BYK-154		•		•	•	0	42	Ammonium salt of an acrylate polymer	Water
DISPERBYK-180		•	0			•	100	Alkylol ammonium salt of a copolymer with acidic groups	
DISPERBYK-184*11	•	•				•	52	Solution of modified polyurethane	Dipropylene glycol monomethyl ether/propylene glycol 2/1
DISPERBYK-185*12	•	•				•	>90	Solution of modified polyurethane	Polyethylene glycol
DISPERBYK-190*13	•	•	0	•	•		40	Solution of modified styrene maleic acid copolymer	Water
DISPERBYK-191	•	•			•	•	100	Modified polyacrylate	
DISPERBYK-192*14			•		•		100	Modified polyether	
DISPERBYK-194 N*15	•	•		•	•		57	Solution of modified carboxyl functional polyglycol copolymer	Water
DISPERBYK-199*13	•	•			•	0	40	Solution of modified styrene maleic acid copolymer	Water
DISPERBYK-2010*16	•	•			•		40	Solution of modified styrene maleic acid copolymer	Water
DISPERBYK-2012	•	•			•	•	40	Solution of modified styrene maleic acid copolymer	Water
DISPERBYK-2014*12	•	•		•	•	•	100	Copolymer with pigment-affinic groups	
DISPERBYK-2015*13	•	•		•	•		40	Solution of modified styrene maleic acid copolymer	Water
DISPERBYK-2055*12	•	•			•		100	Modified polyacrylate	

Especially recommendedRecommended

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<sup>\*\*\*</sup> Also available as (organo) tin-free variant ("TF"). Information on tin-free variants can be found in the brochure B-AN 1 at www.byk.com/en/service/downloads/technical-brochures.

<sup>\*12</sup> For aqueous and solvent-borne systems

<sup>\*13</sup> Also available as biocide-free variant ("BF"). Information on biocide-free variants can be found in the brochure B-AN 2 at www.byk.com/en/service/downloads/technical-brochures.

<sup>\*14</sup> From bio-based raw materials

<sup>\*15</sup> Especially for 2-pack systems \*16 Especially for hydrophobic systems

## Wetting and dispersing additives (2/2)

Product	Organic pigments, carbon blacks	Inorganic pigments	Effect pigments	Matting agents	Grinding without resin	Grinding with resin	Active substance/ non- volatile matter (%)*10	Chemistry	Carrier/solvent
DISPERBYK-2060	•	•	•		•	•	>95	Solution of a copolymer with pigment-affinic groups	Water
DISPERBYK-2062*14	0	•	•		•	•	100	Salt of a copolymer with pigment-affinic groups	
DISPERBYK-2080		•		•	•	•	30	Solution of modified styrene maleic acid copolymer	Water

Especially recommended
Recommended

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<sup>\*11</sup> Also available as (organo) tin-free variant ("TF"). Information on tin-free variants can be found in the brochure B-AN 1 at www.byk.com/en/service/downloads/technical-brochures.

<sup>\*12</sup> For aqueous and solvent-borne systems

<sup>\*13</sup> Also available as biocide-free variant ("BF"). Information on biocide-free variants can be found in the brochure B-AN 2 at www.byk.com/en/service/downloads/technical-brochures.

<sup>\*14</sup> From bio-based raw materials

<sup>\*15</sup> Especially for 2-pack systems \*16 Especially for hydrophobic systems.

# **Leather treatment**

Product	Burnishing effect	Whitening effect	Active substance/ non-volatile matter (%)*6	Chemistry/wax base	Emulsifier	Melting point (wax component) in °C	pH value	Carrier/solvent
AQUACER 497	•		50	Paraffin wax	Non-ionic	60	5.5	Water
AQUACER 531	•		45	Modified PE wax	Non-ionic	130	3.5	Water
AQUACER 533	•		40	Modified paraffin wax	Anionic	95	9.5	Water
AQUACER 539	•		35	Modified paraffin wax	Non-ionic	90	9.5	Water
AQUACER 1039	•		35	Modified paraffin wax	Non-ionic	90	9.0	Water
AQUACER 2650*7	•		30	Carnauba wax	Non-ionic	85	4.5	Water
AQUAMAT 208		•	35	Oxidized HDPE wax		135	8.5	Water
AQUAMAT 263		•	35	Oxidized HDPE wax		130	9.5	Water/propylene glycol n-butyl ether 12/1

<sup>●</sup> Especially recommended ○ Recommended

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<sup>\*7</sup> From bio-based raw materials



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