

ADDITIVE SELECTION CHART ADDITIVES FOR PRINTING INKS AND INKJET INKS



○ LEVELING

○ PIGMENT STABILIZING

○ SCRATCHPROOF



Inkjet inks: „Drop-on-demand (DOD)“ (1/2)

Application	Aqueous	“Strong” Solvent and Continuous Inkjet	“Eco” Solvent (“Mild” Solvent)	UV, solvent-free
Pigment stabilization	Cyan: (PB 15:3/PB 15:4)	Cyan: (PB 15:3/PB 15:4)	Cyan: (PB 15:3/PB 15:4)	Cyan: (PB 15:3/PB 15:4)
	BYKJET-9152 ● BYKJET-9171 ● DISPERBYK-190 ● DISPERBYK-2014 ● BYKJET-9151 ○ BYKJET-9170 ○	BYKJET-9131 ● BYKJET-9132 ● BYKJET-9151 ● DISPERBYK-161 ○ DISPERBYK-163 ○	BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2200 ○ DISPERBYK-2205 ○	BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF* ○
	Magenta: (e.g., PV 19/PR 122/...)	Magenta: (e.g., PV 19/PR 122/...)	Magenta: (e.g., PV 19/PR 122/...)	Magenta: (e.g., PV 19/PR 122/...)
	BYKJET-9170 ● BYKJET-9171 ● DISPERBYK-190 ● BYKJET-9151 ○	BYKJET-9131 ● BYKJET-9132 ○ BYKJET-9152 ○ DISPERBYK-161 ○ DISPERBYK-163 ○	BYKJET-9152 ● BYKJET-9131 ○ BYKJET-9151 ○ DISPERBYK-2001 ○	BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF* ○
	Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...)	Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...)	Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...)	Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...)
	BYKJET-9170 ● BYKJET-9171 ● DISPERBYK-190 ● BYKJET-9151 ○	BYKJET-9131 ● BYKJET-9132 ○ BYKJET-9152 ○	BYKJET-9131 ● BYKJET-9151 ● BYKJET-9152 ○	BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF* ○
Yellow: (PY 150)	Yellow: (PY 150)	Yellow: (PY 150)	Yellow: (PY 150)	
BYKJET-9170 ●	DISPERBYK-2200 ●	DISPERBYK-2200 ●	DISPERBYK-168 ● DISPERBYK-168 TF* ●	
Black: (PBk 7)	Black: (PBk 7)	Black: (PBk 7)	Black: (PBk 7)	
BYKJET-9151 ● DISPERBYK-2014 ● BYKJET-9152 ○ BYKJET-9170 ○ BYKJET-9171 ○ DISPERBYK-190 ○	BYK-9076 ● BYK-9077 ● BYKJET-9151 ○ BYKJET-9152 ○ DISPERBYK-2200 ○	BYKJET-9152 ● DISPERBYK-2200 ● BYKJET-9151 ○ DISPERBYK-2155 ○ DISPERBYK-2155 TF* ○	BYKJET-9151 ● DISPERBYK-168 ● DISPERBYK-168 TF* ● DISPERBYK-2030 ● BYKJET-9150 ○ BYKJET-9152 ○	

● First recommendation ○ Second recommendation * Tin-free version



Inkjet inks: „Drop-on-demand (DOD)“ (2/2)

Application	Aqueous	“Strong” Solvent and Continuous Inkjet	“Eco” Solvent (“Mild” Solvent)	UV, solvent-free
Pigment stabilization	White: (PW 6) DISPERBYK-2010 ● DISPERBYK-2018 ● DISPERBYK-2019 ● DISPERBYK-190 ○	White: (PW 6) DISPERBYK-111 ● DISPERBYK-110 ○ DISPERBYK-118 ○	White: (PW 6) DISPERBYK-2200 ● DISPERBYK-111 ○ DISPERBYK-2152 ○	White: (PW 6) DISPERBYK-111 ● DISPERBYK-2152 ● DISPERBYK-2205 ○
	Green/Orange: (e.g., PG 7/PG 36/PO 34/PO 43/...)	Green/Orange: (e.g., PG 7/PG 36/PO 34/PO 43/...)	Green/Orange: (e.g., PG 7/PG 36/PO 34/PO 43/...)	Green/Orange: (e.g., PG 7/PG 36/PO 34/PO 43/...)
	BYKJET-9171 ● DISPERBYK-190 ○			
Leveling	BYK-3455 ● BYK-3456 ○	BYK-361 N ● BYK-315 N ○	BYK-361 N ● BYK-315 N ○	BYK-361 N ● BYK-3455 ○ BYK-3456 ○ BYK-UV 3530 ○
Substrate wetting (reduction of static surface tension)	BYK-348 ● BYK-3420 ● BYK-3450 ● BYK-3451 ● BYK-3456 ○ BYK-3455 ○	BYK-333 ● BYK-378/BYK-3764** ○	BYK-333 ● BYK-378/BYK-3764** ● BYK-3550 ○ BYK-3760 ○	BYK-UV 3530 ● BYK-UV 3575 ● BYK-3760 ○ BYK-UV 3500 ○ BYK-UV 3505 ○
Drop formation (reduction of dynamic surface tension)	BYK-DYNWET 800 ● BYK-3400 ○ BYK-3410 ○ BYK-3455 ○ BYK-3456 ○			
Surface slip	BYK-333 ● BYK-378/BYK-3764** ●	BYK-333 ● BYK-378/BYK-3764** ●	BYK-333 ● BYK-378/BYK-3764** ● BYK-3760 ○	BYK-378/BYK-3764** ● BYK-UV 3500 ● BYK-UV 3505 ● BYK-3760 ○ BYK-UV 3575 ○
Scratch resistance	AQUACER 513 ● AQUACER 530 ● AQUACER 593 ● HORDAMER PE 03 ● AQUACER 531 ○			NANOBYK-3605 ○
Defoaming	BYK-019/BYK-1709** ● BYK-028 ○ BYK-1770 ○			BYK-1790 ● BYK-1791 ○ BYK-1794 ○ BYK- A 535 ○
Humectant	BYKETOL-PC ●			



Inkjet inks for ceramic substrates

Application	DOD, solvent-borne	Digital glaze (water-borne)
Pigment stabilization	<p>Low polar:</p> <p>BYKJET-9142 ● DISPERBYK-106 ● DISPERBYK-2157 ● ANTI-TERRA-U 100 ○ DISPERBYK-102 ○</p> <p>Middle to high polar:</p> <p>DISPERBYK-180 ● BYKJET-9133 ○ BYKJET-9151 ○ DISPERBYK-111 ○ DISPERBYK-145 ○</p>	<p>DISPERBYK-2010 ● DISPERBYK-2015 ● DISPERBYK-2018 ● DISPERBYK-2019 ●</p>
Substrate wetting (static surface tension control)	<p>BYK-333 ● BYK-307/BYK-3762** ○ BYK-378/BYK-3764** ○</p>	<p>BYK-348 ● BYK-3450 ● BYK-3451 ● BYK-DYNWET 800 ●</p>

● First recommendation ○ Second recommendation

** Product version with reduced content of cyclic siloxanes (D4, D5, D6) below 0.1 %

For more products regarding ceramic inkjet inks please contact graphicarts.byk@altana.com.

Disperse dyes

e. g. Disperse Red 60, Disperse Yellow 54, Disperse Blue 3599

Application	
Pigment stabilization	<p>BYKJET-9171 ● DISPERBYK-190 ● DISPERBYK-2015 ● BYKJET-9152 ○ DISPERBYK-2010 ○</p>
Substrate wetting	<p>BYK-3410 ● BYK-DYNWET 800 ● BYK-348 ○ BYK-3455 ○</p>

● First recommendation ○ Second recommendation

For more products for the use in disperse dyes, please contact graphicarts.byk@altana.com.

Offset inks

Application	
Rheology	<p>CLAYTONE-40 ● CLAYTONE-AF ● CLAYTONE-HT ●</p>
Abrasion resistance	<p>CERAFLOUR 991 ● CERAFLOUR 981 R ○</p>

● First recommendation ○ Second recommendation



Packaging gravure and flexographic inks (1/3)

Application	Solvent-borne	Aqueous	UV 100 %
Pigment stabilization, gloss, transparency			
Inorganic pigments	DISPERBYK-111 ● DISPERBYK-2096 ● ANTI-TERRA U 100 BYK-W 9011 ○ DISPERBYK-180 ○	DISPERBYK-180 ● DISPERBYK-190 ●	DISPERBYK-111 ● DISPERBYK-2013 ● DISPERBYK-2030 ● DISPERBYK-2158 ○ DISPERBYK-2008 ● DISPERBYK-2009 ● (for matting agents)
Organic pigments	DISPERBYK-108 ● DISPERBYK-2023 ● DISPERBYK-2205 ● DISPERBYK-2155 ● DISPERBYK-2155 TF* ● BYK-9076 ○ BYK-9077 ○ BYK-SYNERGIST-2100 ○ BYK-SYNERGIST-2105 ○ DISPERBYK-2117 ○ DISPERBYK-2118 ○ DISPERBYK-2157 ● (for non-polar systems)	DISPERBYK-190 ● DISPERBYK-193 ● DISPERBYK-2014 ● DISPERBYK-192 ○	DISPERBYK-168 ● DISPERBYK-168 TF* ● DISPERBYK-2013 ● DISPERBYK-2030 ● BYK-9076 ○ BYK-9077 ○ DISPERBYK-2155 ○ DISPERBYK-2155 TF* ○
Pigment concentrates	DISPERBYK-108 ● DISPERBYK-2023 ● DISPERBYK-2155 ● DISPERBYK-2155 TF* ● DISPERBYK-2013 ○ DISPERBYK-2157 ● (for non-polar systems)	Grinding with resin: DISPERBYK-190 ● DISPERBYK-193 ● DISPERBYK-2015 ○ Grinding without resin: DISPERBYK-190 ● DISPERBYK-2014 ● DISPERBYK-192 ○ DISPERBYK-2015 ○	DISPERBYK-168 ● DISPERBYK-168 TF* ● DISPERBYK-2013 ● DISPERBYK-2030 ● DISPERBYK-2155 ○ DISPERBYK-2155 TF* ○
Rheology	CLAYTONE AF ● RHEOBYK-7410 ET ● CLAYTONE HY ○ RHEOBYK-R 606 ○ RHEOBYK-R 607 ○ (Combination with silica and phyllosilicates)	RHEOBYK-425 ● RHEOBYK-7420 ES ○	RHEOBYK-R 606 ○ RHEOBYK-R 607 ○ (Combination with silica and phyllosilicates)



Packaging gravure and flexographic inks (2/3)

Application	Solvent-borne	Aqueous	UV 100 %
Substrate wetting	<p>Silicone: BYK-307/BYK-3762** ● BYK-333 ● BYK-3760 ● BYK-378/BYK-3764** ○</p> <p>Silicone-free: BYK-DYNWET 800 ●</p>	<p>Silicone: BYK-333 ● BYK-3450 ● BYK-3451 ● BYK-347 ○ BYK-3455 ○ BYK-3760 ○</p> <p>Silicone-free: BYK-DYNWET 800 ●</p>	<p>Silicone: BYK-377/BYK-3771** ● BYK-3760 ● BYK-UV 3500 ● BYK-333 ○ BYK-378/BYK-3764** ○</p>
Leveling	<p>BYK-361 N ●</p>	<p>BYK-381 ●</p>	<p>Silicone: BYK-307/BYK-3762** ● BYK-3760 ● BYK-333 ○ BYK-378/BYK-3764** ○ BYK-3455 ○</p> <p>Silicone-free: BYK-361 N ● BYK-381 ●</p>
Increase of surface energy	<p>BYK-3560 ● BYK-3565 ● BYK-3566 ●</p>	<p>BYK-3560 ● BYK-3565 ● BYK-3566 ●</p>	<p>BYK-3560 ● BYK-3565 ● BYK-3566 ●</p>
Surface slip	<p>Silicone: BYK-307/BYK-3762** ● BYK-333 ○ BYK-378/BYK-3764** ○ BYK-3760 ○</p> <p>Wax: CERACOL 83 ○ CERAFLOR 991 ○ CERAFLOR 999 ○</p>	<p>Silicone: BYK-307/BYK-3762** ● BYK-333 ○ BYK-378/BYK-3764** ○</p> <p>Wax: AQUACER 539 ● CERAFLOR 950 ○ CERAFLOR 991 ○</p>	<p>Silicone: BYK-307/BYK-3762** ● BYK-377/BYK-3771** ● BYK-3760 ○</p> <p>Wax: CERAFLOR 950 ● CERAFLOR 991 ○</p>
Anti-slip	<p>CERAFLOR 970 ● CERAFLOR 1001 ○ CERAFLOR 1002 ○</p>	<p>AQUACER 593 ● AQUACER 527 ○</p>	<p>CERAFLOR 970 ●</p>

● First recommendation ○ Second recommendation ** Product version with reduced content of cyclic siloxanes (D4, D5, D6) below 0.1 %



Packaging gravure and flexographic inks (3/3)

Application	Solvent-borne	Aqueous	UV 100 %
Abrasion resistance	<p>Silicone: BYK-333 ● BYK-307/BYK-3762** ○ BYK-378/BYK-3764** ○</p> <p>Wax: CERACOL 83 ○ CERAFLOR 929 N ○ CERAFLOR 981 R ○ CERAFLOR 996 R ○ CERAFLOR 999 ○</p>	<p>Silicone: BYK-307/BYK-3762** ○</p> <p>Wax: AQUACER 532 ● HORDAMER PE 35 ○</p> <hr/> AQUACER 8059 ○ (USA, Canada, Mexico only) <hr/> AQUAMAT 208 ○ CERAFLOR 929 N ○	<p>Silicone: BYK-377/BYK-3771** ● BYK-UV 3510 ●</p> <p>Wax: CERAFLOR 950 ● CERAFLOR 991 ○</p>
Water resistance		AQUACER 497 ○ AQUACER 539 ○	
Defoaming	<p>Silicone: BYK-088 ● BYK-A 530 ○</p> <p>Silicone-free: BYK-1751 ● BYK-1752 ● BYK-1759 ●</p>	<p>Silicone: BYK-017/BYK-1707** ● BYK-024 ● BYK-094 ● BYK-021 ○ BYK-022 ○ BYK-044 ○ BYK-1719 ○ BYK-1780 ○</p> <p>Silicone-free: BYK-012 ○ BYK-016 ○</p>	<p>Silicone: BYK-088 ● BYK-1797 ○ BYK-1799 ○ BYK-A 530 ○</p> <p>Silicone-free: BYK-1751 ● BYK-1752 ● BYK-1790 ● BYK-1791 ● BYK-1794 ○</p>
Matting	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ● <hr/> CERAFLOR 921 ○ (USA, Canada, Mexico only)	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ● <hr/> AQUAMAT-208 ○ CERAFLOR 929 N ○	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ●

● First recommendation ○ Second recommendation ** Product version with reduced content of cyclic siloxanes (D4, D5, D6) below 0.1 %



Overprint varnishes (1/2)

Application	Aqueous	UV, aqueous	UV 100 %
Substrate wetting	<p>Silicone: BYK-348 ● BYK-3450 ● BYK-3451 ● BYK-345 ○</p> <p>Silicone-free: BYK-DYNWET 800 ○</p>	<p>Silicone: BYK-3455 ●</p> <p>Silicone-free: BYK-DYNWET 800 ●</p>	<p>Silicone: BYK-377/BYK-3771** ● BYK-UV 3500 ● BYK-UV 3510 ● BYK-UV 3505 ○</p> <p>Silicone-free: BYK-381 ○</p>
Leveling	<p>Silicone: BYK-333 ● BYK-307/BYK-3762** ○ BYK-378/BYK-3764** ○</p> <p>Silicone-free: BYK-381 ●</p>	<p>Silicone: BYK-345 ●</p> <p>Silicone-free: BYK-381 ●</p>	<p>Silicone: BYK-377/BYK-3771** ● BYK-3455 ● BYK-345 ○ BYK-UV 3505 ○</p> <p>Silicone-free: BYK-354 ○ BYK-381 ○</p>
Surface slip	<p>Silicone: BYK-307/BYK-3762** ● BYK-333 ○ BYK-378/BYK-3764** ○</p> <p>Waxes: AQUACER 539 ● CERAFLOR 950 ○ CERAFLOR 991 ○ HORDAMER PE 35 ○</p>	<p>Silicone: BYK-307/BYK-3762** ● BYK-333 ● BYK-378/BYK-3764** ○</p> <p>Waxes: AQUACER 539 ● HORDAMER PE 35 ○</p>	<p>Silicone: BYK-377/BYK-3771** ● BYK-3760 ● BYK-307/BYK-3762** ○ BYK-UV 3500 ○ BYK-UV 3505 ○</p> <p>Waxes: CERAFLOR 950 ● CERAFLOR 991 ●</p>
Anti-slip	<p>AQUACER 593 ● AQUACER 527 ○</p>	<p>AQUACER 593 ●</p>	<p>CERALOUR 970 ●</p>

● First recommendation ○ Second recommendation ** Product version with reduced content of cyclic siloxanes (D4, D5, D6) below 0.1 %



Overprint varnishes (2/2)

Application	Aqueous	UV, aqueous	UV 100 %
Abrasion resistance	<p>Silicone: BYK-333 ● BYK-378/BYK-3764** ○</p> <p>Waxes: AQUACER 530 ● AQUACER 532 ○ HORDAMER PE 35 ○</p> <hr/> AQUACER 8059 ○ (USA, Canada, Mexico only) <hr/> CERAFLOR 929 N ○	<p>Silicone: BYK-333 ● BYK-UV 3500 ● BYK-378/BYK-3764** ○</p> <p>Waxes: AQUACER 532 ●</p>	<p>Silicone: BYK-377/BYK-3771** ● BYK-UV 3510 ●</p> <p>Waxes: CERAFLOR 950 ● CERAFLOR 991 ○</p>
Water resistance	AQUACER 497 ● AQUACER 539 ○	AQUACER 497 ● AQUACER 539 ○	
Defoaming	<p>Silicone: BYK-019/BYK-1709** ● BYK-1719 ● BYK-021 ○ BYK-022 ○ BYK-1780 ○ BYK-1785 ○</p> <p>Silicone-free: BYK-016 ●</p>	<p>Silicone: BYK-019/BYK-1709** ● BYK-1719 ● BYK-094 ○</p>	<p>Silicone: BYK-019/BYK-1709** ● BYK-088 ○</p> <p>Silicone-free: BYK-1751 ● BYK-1752 ● BYK-1790 ● BYK-1794 ●</p>
Matting	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ●	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ●	CERAFLOR 1000 ● CERAFLOR 1001 ● CERAFLOR 1002 ●
Rheology	RHEOBYK-425 ● RHEOBYK-7420 ES ●	RHEOBYK-425 ● RHEOBYK-7420 ES ●	RHEOBYK-7410 ET ●

● First recommendation ○ Second recommendation ** Product version with reduced content of cyclic siloxanes (D4, D5, D6) below 0.1 %

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This issue replaces all previous versions.

