BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Kronos 2044	Kronos 2190	Kronos 2300	Kronos 2310	Kronos 2360	Ti-Pure R706
				PW 6	PW 6	PW 6	PW 6	PW 6	PW 6
1	Water		Solvent	28,9	16,6	16,0	15,5	14,7	17,0
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,3**	**0,4**	**0,3**	**0,3**	**0,3**	**0,3**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**4,1**	**3,8**	**2,8**	**2,8**	**2,8**	**2,8**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,5**	**0,5**	**0,4**	**0,5**	**0,5**	**0,6**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	55,0	75,0	75,0	75,0	75,0	75,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	10,9	3,4	5,2	5,6	6,4	4,0
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**3,0**	**2,0**	**1,5**	**1,5**	**1,5**	**1,5**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Ti-Pure R900	Ti-Pure R931	Tiona RCL 595	Tiona RCL 696	Tronox CR 813	Tronox CR 826
				PW 6	PW 6	PW 6	PW 6	PW 6	PW 6
1	Water		Solvent	16,6	25,9	18,0	17,0	33,9	17,4
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,3**	**0,3**	**0,3**	**0,3**	**0,3**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**3,8**	**4,1**	**2,8**	**2,8**	**4,1**	**2,8**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,5**	**0,5**	**0,5**	**0,5**	**0,5**	**0,5**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	75,0	55,0	75,0	75,0	55,0	75,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	3,4	13,9	3,1	4,1	5,9	3,7
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**2,0**	**3,0**	**1,5**	**1,5**	**3,0**	**1,5**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Tronox CR 828	Tioxide RTC 90	Tioxide TR 81	Tioxide TR 85	Tioxide TR 92	Tioxide TR 94
				PW 6	PW 6	PW 6	PW 6	PW 6	PW 6
1	Water		Solvent	16,6	17,4	16,6	18,0	17,7	17,7
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,3**	**0,4**	**0,3**	**0,3**	**0,3**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**3,8**	**2,8**	**3,8**	**1,9**	**2,8**	**2,8**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,5**	**0,5**	**0,5**	**0,5**	**0,5**	**0,5**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	75,0	75,0	75,0	75,0	75,0	75,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	3,4	3,7	3,4	4,0	3,4	3,4
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**2,0**	**1,5**	**2,0**	**1,0**	**1,5**	**1,5**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Bayferrox 420	Bayferrox 943	Bayferrox 3905	Bayferrox 3910	Bayferrox 3920	Irgazin yellow 2094
				PY 42	PY 42	PY 42	PY 42	PY 42	PY 184
1	Water		Solvent	29,9	25,0	24,0	23,4	23,4	20,0
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**8,8**	**9,6**	**10,0**	**9,6**	**9,6**	**12,5**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,5**	**0,5**	**0,5**	**0,5**	**0,5**	**0,8**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	10,0
8	Pigment	see headline	Color	50,0	55,0	57,0	55,0	55,0	50,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	10,1	9,2	7,8	10,8	10,8	6,0
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**7,0**	**7,0**	**7,0**	**7,0**	**7,0**	**10,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Hansa-brillant yellow 2GX70	Chromo-phtal yellow 3G	Paliotol yellow L 0960 HD	Paliotol yellow L 0962 HD	Sico orange L 3052 HD	Novoperm orange HL 70
				PY 74	PY 93	PY 138	PY 138	PO 5	PO 36
1	Water		Solvent	28,9	29,9	29,9	30,8	27,0	27,9
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,7**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**15,0**	**20,0**	**20,0**	**16,3**	**18,8**	**17,5**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,4**	**-**	**0,3**	**-**	**0,5**	**0,3**
6	ASP 170	BASF	Filler	-	-	-	8,0	-	-
7	Sachtleben micro	Sachtleben	Filler	15,0	-	-	10,0	-	-
8	Pigment	see headline	Color	40,0	40,0	40,0	25,0	50,0	35,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent		7,4	8,8	9,2	3,0	18,6
				100,0	98,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**15,0**	**20,0**	**20,0**	**26,1**	**15,0**	**20,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Cinilex DPP orange SJ1C	Bayferrox 105M	Bayferrox 110M	Bayferrox 120M	Bayferrox 130M	Bayferrox 140M
				PO 73	PR 101	PR 101	PR 101	PR 101	PR 101
1	Water		Solvent	28,0	24,5	24,3	22,9	18,7	18,7
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**17,5**	**9,6**	**9,0**	**8,2**	**8,2**	**8,2**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,3**	**0,5**	**0,6**	**0,6**	**0,6**	**0,6**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	35,0	55,0	60,0	65,0	65,0	65,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	18,5	9,7	5,4	2,6	6,8	6,8
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**20,0**	**7,0**	**6,0**	**5,0**	**5,0**	**5,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Bayferrox 160M	Bayferrox 180M	Ferro PS 22-5091	Ferro PS 21-4030	Permanent red FGR	Permanent red FGR 70
				PR 101	PR 101	PR 101	PR 101	PR 112	PR 112
1	Water		Solvent	18,7	18,5	20,2	24,0	39,9	39,9
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**8,2**	**8,2**	**11,3**	**7,5**	**17,0**	**17,0**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,6**	**0,6**	**0,6**	**0,6**	**-**	**-**
6	ASP 170	BASF	Filler	-	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	65,0	65,0	60,0	60,0	40,0	40,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	6,8	7,0	7,2	7,2	2,4	2,4
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**5,0**	**5,0**	**7,5**	**5,0**	**17,0**	**17,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Hostaperm Scarlett GO	Monastral magenta RT 2436-D	Hostaperm red D2G 70	Irgazin red L3670HD	Hostaperm pink E	Sunfast violet 228-1119
				PR 168	PR 202	PR 254	PR 254	PR 122	PV 19
1	Water		Solvent	34,8	35,0	26,9	19,9	36,8	35,0
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,8**	**0,4**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**17,5**	**25,0**	**20,0**	**20,0**	**22,5**	**18,8**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**-**	**-**	**0,4**	**0,4**	**-**	**-**
6	ASP 170	BASF	Filler	10,0	-	-	10,0	-	-
7	Sachtleben micro	Sachtleben	Filler	10,0	-	10,0	-	10,0	-
8	Pigment	see headline	Color	20,0	30,0	40,0	40,0	30,0	25,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	7,0	8,9	2,0	9,0	-	20,5
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**35,0**	**33,3**	**20,0**	**20,0**	**30,0**	**30,1**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Hostaperm violet RL-NF	Ultramarin blue Nubicoat HWR	Hostaperm blue A4R	Sunfast blue 248-3754	Sunfast blue 249-1284	Hostaperm blue B2G
				PV 23	PB 29	PB 15:1	PB 15:2	PB 15:3	PB 15:3
1	Water		Solvent	18,0	23,0	21,0	25,0	40,0	35,0
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,3**	**0,4**	**0,8**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**22,5**	**13,8**	**26,3**	**30,0**	**15,0**	**15,0**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,3**	**0,4**	**0,4**	**-**	**0,3**	**0,3**
6	ASP 170	BASF	Filler	10,0	-	-	-	-	-
7	Sachtleben micro	Sachtleben	Filler	-	-	10,0	-	-	-
8	Pigment	see headline	Color	30,0	55,0	35,0	35,0	30,0	30,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,3**	**0,2**	**0,2**
10	Water		Solvent	18,5	7,2	6,6	8,8	14,0	19,0
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**30,0**	**10,0**	**30,1**	**34,3**	**20,0**	**20,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Heliogen blue L7101F	Heliogen green L8730	Heuco green 600703	Raven 410	Monarch 120	Monarch 480
				PB 15:4	PG 7	PG 7	PBk 7	PBk 7	PBk 7
1	Water		Solvent	22,0	22,5	23,0	39,0	19,1	19,1
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,4**	**0,8**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**26,3**	**26,3**	**26,3**	**24,7**	**20,0**	**25,0**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,4**	**0,5**	**0,5**	**-**	**0,2**	**0,2**
6	ASP 170	BASF	Filler	10,0	8,0	10,0	-	15,0	10,0
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	-	-
8	Pigment	see headline	Color	35,0	35,0	35,0	33,0	20,0	25,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,3**	**0,2**	**0,2**
10	Water		Solvent	5,6	7,0	4,5	2,1	25,0	20,0
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**30,1**	**30,1**	**30,1**	**29,9**	**40,0**	**40,0**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA

BYK-Chemie GmbH
Abelstrasse 45, 46483 Wesel, Germany
Tel +49 281 670-0, Fax +49 281 670-35
info@byk.com, www.byk.com

BYK Additives & Instruments

Starting Formulation

Pigment concentrates for water borne systems using DISPERBYK-199

Pos.	Component	Supplier	Function	Elftex 415	Elftex 430	Lamp black 101	Special black 4	Special black 100	Special black 100
				PBk 7	PBk 7	PBk 7	PBk 7	PBk 7	PBk 7
1	Water		Solvent	20,0	15,0	18,0	19,1	35,5	20,0
2	Preservative		Preservative	0,1	0,1	0,1	0,1	0,1	0,1
3	**BYK-1640**	**BYK**	**Defoamer**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**	**0,4**
4	**DISPERBYK-199**	**BYK**	**Wetting&Dispersing**	**9,0**	**25,0**	**20,0**	**20,0**	**6,5**	**21,9**
5	**OPTIGEL-WX**	**BYK**	**Anti-settling**	**0,4**	**0,2**	**0,2**	**0,5**	**0,5**	**0,5**
6	ASP 170	BASF	Filler	20,0	10,0	10,0	10,0	20,0	8,0
7	Sachtleben micro	Sachtleben	Filler	-	-	-	-	20,0	15,0
8	Pigment	see headline	Color	9,0	25,0	20,0	20,0	4,0	20,0
	Grinding								
9	**BYK-1640**	**BYK**	**Defoamer**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**
10	Water		Solvent	40,9	24,1	31,1	29,7	12,8	13,9
				100,0	100,0	100,0	100,0	100,0	100,0

Characteristic Data

% Additive Dosage (solids on pigment)

DISPERBYK-199	**40,0**	**40,0**	**40,0**	**40,0**	**65,0**	**43,8**

Instructions

Premix position 1-5, add pigment/filler and disperse well (dissolver or beads are recommended), add position 9-10 under stirring

ACTAL®, ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, PRIEX®, PURE THIX®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® **are registered trademarks of the BYK group.**

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

A member of ALTANA