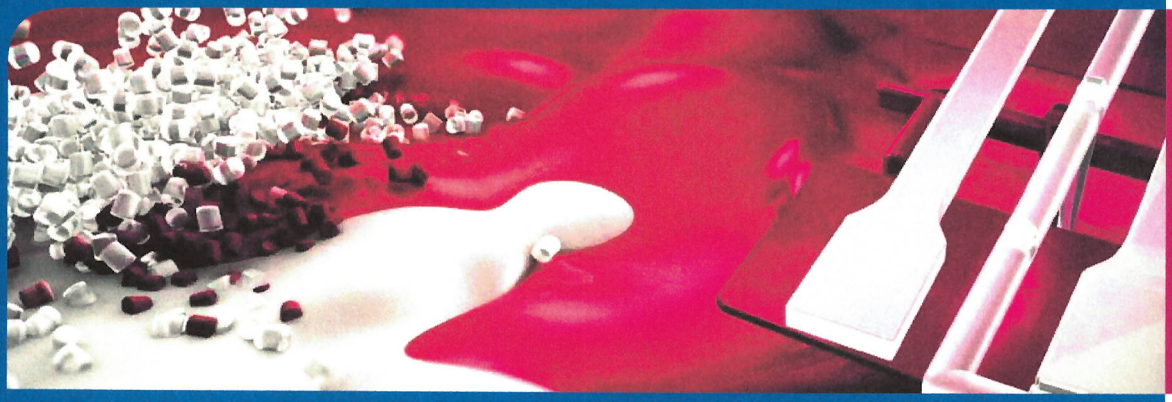
BYK
Additives & Instruments



Additive Selection Chart TP-AG 1

Additives for Thermoplastics

September 2014

A member of ALTANA

BYK
Additives & Instruments

Thermoplastics

Additives for Masterbatch Production

Liquid Color Masterbatches

	Titanium Dioxide	Inorganic Pigments	Organic Pigments	Carbon Black	
				Acidic/Neutral	Basic
Pigment Stabilization for PE, PP	DISPERPLAST-1150 BYK-P 4100 BYKOPLAST-1000	BYK-P 4100 BYKOPLAST-1000 DISPERPLAST-1150	BYK-9076 BYK-P 4100 BYKOPLAST-1000	BYK-9076 BYKOPLAST-1000	BYK-9077 BYKOPLAST-1000
Pigment Stabilization for PET	BYKOPLAST-1000 BYK-P 4100 DISPERBYK-192 DISPERPLAST-1150	BYK-P 4100 BYKOPLAST-1000 DISPERBYK-192 DISPERPLAST-1150	BYK-9076 BYK-P 4100 BYKOPLAST-1000 DISPERBYK-192	BYK-9076 In food applications: DISPERBYK-192 BYKOPLAST-1000	BYK-9077 In food applications: DISPERBYK-192 BYKOPLAST-1000

Solid Masterbatches

	Inorganic Pigments	Organic Pigments	Carbon Black		Effect Pigments	Blowing Agents	Nanoclays	One Packs
			Acidic/Neutral	Basic				
Dispersion of Solids in PP	BYK-P 4102 DISPERPLAST-1018 DISPERPLAST-1150	BYK-9076 BYK-P 4102 DISPERPLAST-1018	BYK-9076 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-9077 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-P 4102 SCONA TPPE 5002 GALL DISPERPLAST-1150	BYK-P 4102 DISPERPLAST-1018 BYK-9076	SCONA TPPP 2112 FA	SCONA TPPP 8112 FA SCONA TPPP 9012 FA SCONA TPPP 9112 FA
Dispersion of Solids in PE, PS, ABS	BYK-P 4102 DISPERPLAST-1018 DISPERPLAST-1150	BYK-9076 BYK-P 4102 DISPERPLAST-1018	BYK-9076 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-9077 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-P 4102 SCONA TPPE 5002 GALL DISPERPLAST-1150	BYK-P 4102 DISPERPLAST-1018 BYK-9076		
Dispersion of Solids in PET	BYK-P 4102 DISPERPLAST-1018 DISPERPLAST-1150	BYK-9076 BYK-P 4102 DISPERPLAST-1018	BYK-9076 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-9077 BYK-P 4102 In food applications: DISPERPLAST-1018	BYK-P 4102 SCONA TPPE 5002 GALL DISPERPLAST-1150	BYK-P 4102 DISPERPLAST-1018 BYK-9076		

First recommendation Second recommendation

Additives for Compounding

Polyethylene (PE)

	Filler Dispersion			Improved Mechanical Properties		Scratch Resistance	VOC Reduction	UV Protection
	Aluminium Trihydrate (ATH), Magnesium Hydroxide (MGH)	Calcium Carbonate	Talc, Wollastonite, Mica	Glass Fibers (short, long)	Natural Fibers (Injection Molding, Extrusion)			
Mineral-filled	BYK-P 4102 SCONA TSPE 1112 GALL SCONA TSEB 2113 GB	BYK-P 4101 BYK-P 4102 SCONA TPEV 1112 PB SCONA TSPE 1112 GALL	BYK-P 4101 BYK-P 4102			BYK-TS 3200 BYK-TS 3201	BYK-P 4200	
Fiber-reinforced				BYK-P 4102 SCONA TSPE 2102 GAHD SCONA TSPE 1112 GALL	SCONA TSPE 2102 GAHD SCONA TSPE 1112 GALL	BYK-TS 3200 BYK-TS 3201	BYK-P 4200	
Non-filled						BYK-TS 3200 BYK-TS 3201	BYK-P 4200	NANOBYK-3845

Polypropylene (PP)

	Filler Dispersion			Improved Mechanical Properties		Scratch Resistance	VOC Reduction	UV Protection
	Aluminium Trihydrate (ATH), Magnesium Hydroxide (MGH)	Calcium Carbonate	Talc, Wollastonite, Mica	Glass Fibers (short, long)	Natural Fibers (Injection Molding, Extrusion)			
Mineral-filled	BYK-P 4102 SCONA TPPP 2003 GB SCONA TPPP 9112 GA	BYK-P 4101 BYK-P 4102 SCONA TPPP 2003 GB SCONA TPPP 9112 GA	BYK-P 4101 BYK-P 4102			BYK-TS 3200 BYK-TS 3201	BYK-P 4200	
Fiber-reinforced				BYK-P 4102 SCONA TPPP 9012 GA SCONA TPPP 9112 GA SCONA TPPP 9212 GA	SCONA TPPP 8112 GA SCONA TPPP 9212 GA	BYK-TS 3200 BYK-TS 3201	BYK-P 4200	
Non-filled						BYK-TS 3200 BYK-TS 3201	BYK-P 4200	NANOBYK-3845

Polyamide (PA)

	Filler Dispersion		Improved Mechanical Properties	Improved Impact Strength		Compatibilizer for PA Blends		
	Calcium Carbonate	Talc, Wollastonite, Mica	Glass Fibers (short, long)	Injection Molding	Extrusion	With PE	With PP	With SPS, PPO
Mineral-filled	BYK-P 4102 BYK-P 4101	BYK-P 4102 BYK-P 4101 DISPERPLAST-1018		High impact strength: SCONA TSKD 9103 SCONA TSPOE 1002 CMB 1-2 SCONA TSPOE 1002 GBLL	SCONA TPEV 1110 PB SCONA TPPE 2400 GAHD			
Fiber-reinforced			BYK-P 4102 SCONA TSEB 2113 GB	Medium impact strength: SCONA TSEB 2113 GB SCONA TSPOE 1002 CMB 1-2				
Non-filled						SCONA TSPE 1112 GALL SCONA TSPE 2102 GAHD	SCONA TPPP 2003 GB SCONA TSPOE 1002 GBLL SCONA TPPP 2112 GA SCONA TSKD 9103	SCONA TPSPS 9012 PA

Acrylonitrile-Butadiene-Styrene-Copolymer (ABS)

	Filler Dispersion	Improved Mechanical Properties	VOC Reduction
	Calcium Carbonate, Talc, Wollastonite, Mica	Glass Fibers (short, long)	
Mineral-filled	BYK-P 4101 BYK-P 4102		BYK-P 4200
Fiber-reinforced		BYK-P 4102	BYK-P 4200
Non-filled			BYK-P 4200

Polyethylene Terephthalate (PET)

	Filler Dispersion		Improved Mechanical Properties	Improved Impact Strength	
	Calcium Carbonate	Talc, Wollastonite, Mica	Glass Fibers (short, long)	High Impact Strength	Tear Resistance
Mineral-filled	BYK-P 4102 BYK-P 4101	BYK-P 4102 BYK-P 4101 DISPERPLAST-1018		SCONA TSPOE 1002 CMB 1-2 SCONA TSPOE 1002 GBLL	SCONA TPPP 2003 GB SCONA TSPOE 1002 CMB 1-2
Fiber-reinforced			BYK-P 4102		
Non-filled					

Polybutylene Terephthalate (PBT)

	Filler Dispersion		Improved Mechanical Properties
	Calcium Carbonate	Talc, Wollastonite, Mica	Glass Fibers (short, long)
Mineral-filled	BYK-P 4102 BYK-P 4101	BYK-P 4102 BYK-P 4101 DISPERPLAST-1018	
Fiber-reinforced			BYK-P 4102

First recommendation Second recommendation

Additives for Compounding

Polystyrene (PS)

	Filler Dispersion Calcium Carbonate, Talc, Wollastonite, Mica	Improved Mechanical Properties Glass Fibers (short, long)
Mineral-filled	**BYK-P 4101** **BYK-P 4102**	
Fiber-reinforced		**BYK-P 4102**

Polylactide (PLA)

	Improved Mechanical Properties Natural Fibers (Injection Molding, Extrusion)
Fiber-reinforced	**BYK-P 4101**

Thermoplastic Elastomers (TPE)

TPE-S-Overmolding		Anti-caking
Adhesion Modification (on PC, ABS, PA)	Low Compression Set	
SCONA TPPP 2112 GA **SCONA TSKD 9103** SCONA TPPP 8112 GA	**SCONA TPKD 5103 PCS** **SCONA TPPP 2112 GA** SCONA TPKD 2103 PCS	**AQUACER 531** **AQUACER 581** **HORDAMER PE 02** Defoamer for underwater pelletizing: BYK-016 BYK-023

First recommendation Second recommendation