

Substance for Success.



Product Guide CM-PG 2

Additives for Bulk Molding Compounds (BMC) and Thick Molding Compounds (TMC)



# Wetting and **Dispersing Additives**

Incorporation of fillers increases paste viscosity.

BYK wetting and dispersing additives facilitate the incorporation of fillers and lower paste viscosity.

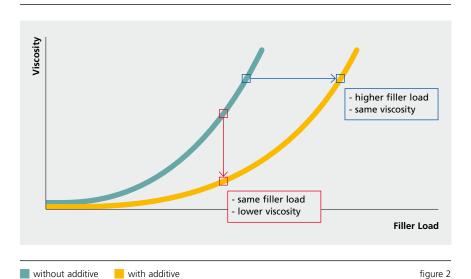
As a result, higher filler loading is possible. Lower viscosity improves and speeds up the wetting of the glass fibers.

# **The Wetting and Dispersing Process**



figure 1

# Lower Viscosity, Higher Filler Load



#### **Application Fields and Dosages**

	Viscosity stabilization	Low emission	Class A	LP	LS
BYK-W 995	0.2-0.5%		0.2-1%	0.2-1%	0.2-1%
BYK-W 996	0.2-0.5%		0.2-1%	0.2-1%	0.2-1%
BYK-W 9010	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%	0.1-0.5%
BYK-W 9011	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%	0.1-0.5%

% based on filler figure 3

# Anti-Separation Additives

LS or LP additives such as PS or SBS are incompatible with the UP resin and can cause phase separation in the paste. The use of BYK additives helps to compatibilize both phases and stabilize the paste during storage and processing.

### **UP & LS-Resin with Filler and Pigment**



With BYK additive

figure 4

#### **Anti-Separation Additives**

Without

additive

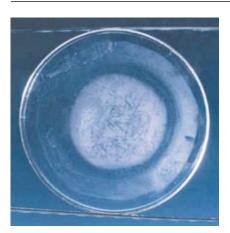
	LS
BYK-9076	0.3-1 phr
BYK-W 972	0.5-1 phr
BYK-W 974	0.3-1 phr

figure 5

# **Processing Additives**

To prevent fogging in head lamps or lamp housing, and to improve pigmentability in LS-formulations, processing additives are used.

# Fogging







With BYK-P 9051

figure 7

# **Pigmentation**



Without processing additive



With BYK-P 9060 or BYK-P 9065

figure 6

# **Application Fields and Dosages**

	LS	Head lamp	LP Class A
BYK-P 9050		3-4 phr	
BYK-P 9051		3-4 phr	
BYK-P 9060	3-4 phr		
BYK-P 9065	2-2.5 phr		
BYK-P 9080			4-5 phr

figure 8

# **Products and Applications**

#### **BYK Additives**

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

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

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#### **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

#### **PUR Industry**

- C.A.S.E. Applications
- PUR Foams

# **Printing Ink Industry**

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

#### **Paper Coatings**

- Impregnation
- Coatings

#### **Adhesives & Sealants**

#### **Construction Chemicals**

#### **Pigment Concentrates**

**Raw Materials for Manufacturing** of Release Agents

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