

## Press Release

Processing additives for polyurethane foam applications – meeting the challenges of compatibility and processability

**Wesel, January 21, 2009: With its new class of additives, BYK is setting new standards in polyurethane foam applications. This unique group of processing additives improves both the compatibility and the processability of foam systems.**

Incompatibility and separation are familiar phenomena in today's foam formulations. Specialty foams such as super soft and viscoelastic grades, for example, require components of different chemical compositions and polarity. These products, however, are of either limited solubility or complete incompatibility. This is an ideal application scenario for processing additives – in this case compatibilizers – since this group of additives helps overcome the incompatibilities between various raw materials in the formulation.

Compatibility is one issue, but processability (in production) presents another major challenge:

Anti-sedimentation / floating additives, for example, prevent the sedimentation of CaCO<sub>3</sub> and melamine powder or the floatation of ground PU foam or PE powder. This is achieved by means of thixotropy and the build-up of a slight yield value in the polyol.

Anti-cold-flow additives improve the dimension stability of the foam and thus reduce the cold flow effect.

Hydrophilic additives influence the water-absorbing properties of polyether / polyester foams, thus increasing the water receptivity and the absorption rate of the foam.

Viscosity modifiers improve the flow behavior and pumpability of higher viscosity polyols or systems, especially at lower temperatures. The additives are 100% isocyanate reactive.

Processing additives				
Compatibilizer	Anti-sedimentation / anti-floating additive	Anti-cold-flow additive	Hydrophilic additive for polyether / polyester foams	Viscosity reducer for polyols and foam systems
BYK®-P 9900 BYK®-P 9901 BYK®-P 9902 BYK®-P 9903 BYK®-P 9904 BYK®-P 9905	BYK®-P 9906	BYK®-P 9910	BYK®-P 9911	BYK®-P 9915

Survey: BYK processing additives

Date  
January 21, 2009

Page  
1/2

Contact  
Market Communication

Frank Dederichs  
Head of Market Communication  
Tel. +49 281 670-217  
Fax +49 281 670-660

Verena Skelnik  
Market Communication  
Tel. +49 281 670-741  
Fax +49 281 670-660

BYK-Chemie GmbH  
Abelstrasse 45  
46483 Wesel  
Germany  
Tel. +49 281 670-0  
Fax +49 281 65735  
info@byk.com  
www.byk.com

## Press Release

### **About BYK Additives & Instruments:**

BYK Additives & Instruments is one of the world's leading suppliers in the additives and instruments sector.

Approximately 85% of our sales are generated by foreign countries. Our major export markets are Europe, the United States and the Far East.

Additives are used by processing industries in the production of coatings, inks, plastics and papers. In very small quantities, BYK additives simplify manufacturing processes and significantly improve the quality of finished goods such as motor vehicles and furniture.

BYK Instruments can quantify the quality of color and gloss and the physical properties of paint, plastic and paper products. Instruments from BYK are predominantly used for quality control.

BYK Additives & Instruments is a member of ALTANA, Wesel. ALTANA develops and produces high-quality, innovative products in the sector of specialty chemicals.

BYK Additives & Instruments employs around 1,140 people worldwide, 25% of whom work in research and development departments or technical laboratories.

**This press release is also available on the internet at: [www.byk.com/press\\_releases](http://www.byk.com/press_releases).**

Date  
**January 21, 2009**

Page  
**2/2**