

Substance for Success.

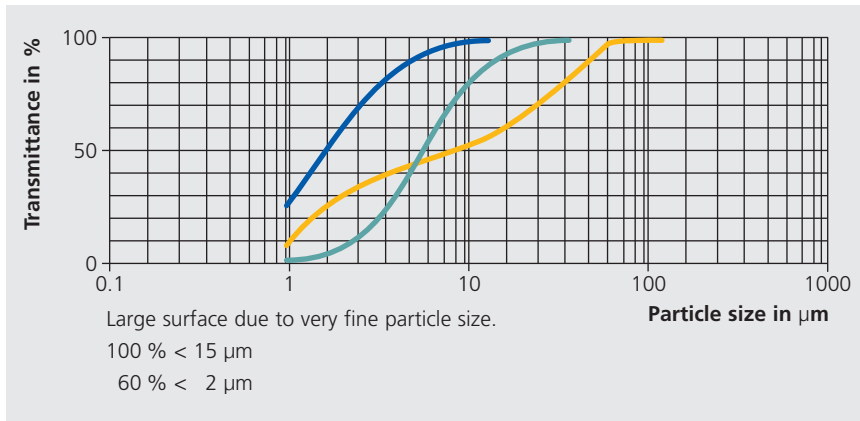


Technical Information PVC-TI 5

# Moisture Absorber

PVC Plastisol Applications

### Particle Size Analysis (Laser Diffraction)



■ BYK-2616   ■ various CaO pastes   ■ CaO powder

figure 1

## Moisture Absorber BYK-2616

BYK-2616 is a finely-dispersed (74% solids), low-emission CaO paste. This pumpable product is stable under normal storage conditions. The high amount of surface area gives the BYK-2616 its optimal effectiveness (figure 1).

BYK-2616 eliminates moisture, even in large amounts, in a short period of time. Utilizing a special preparation technique, in combination with wetting and dispersing additives, the inorganic moisture absorber CaO is activated and stabilized. Thus, an extremely favorable dosage/effect is achieved.

### Efficiency of BYK-2616 Compared to Other Moisture Absorbers

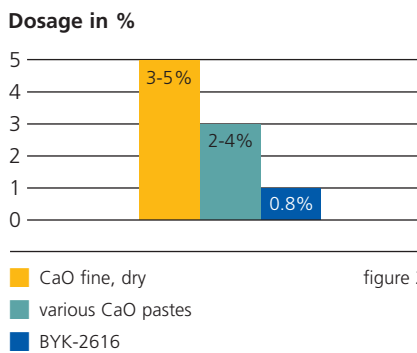


figure 2

## Dosage and Incorporation

The dosage depends on the moisture level in the system, usually between 0.75-2.5% (figure 2). The exact dosage should be determined by a series of tests. The influence on color, cell structure and chemical embossing inhibition should be tested before using the CaO paste in a chemically foamed plastisol.

BYK-2616 can be incorporated at any time of the production of the PVC plastisol. It is important that the BYK-2616 is well dispersed into the system.

# Benefits of BYK-2616

- Good storage stability (figure 3).
- Pumpable (figure 4).
- Dust-free incorporation.
- Eliminates even large quantities of moisture very quickly. Surface defects such as blistering and craters can be prevented, during the processing of plastics e.g. PVC, PUR and rubber (figure 5).
- Enables coating without pre-drying if moisture is present in the carrier or substrate.
- Absorbs moisture carried into the system by the polymer, fillers, pigments or reinforcement.

## Good Storage Stability due to High Yield Point

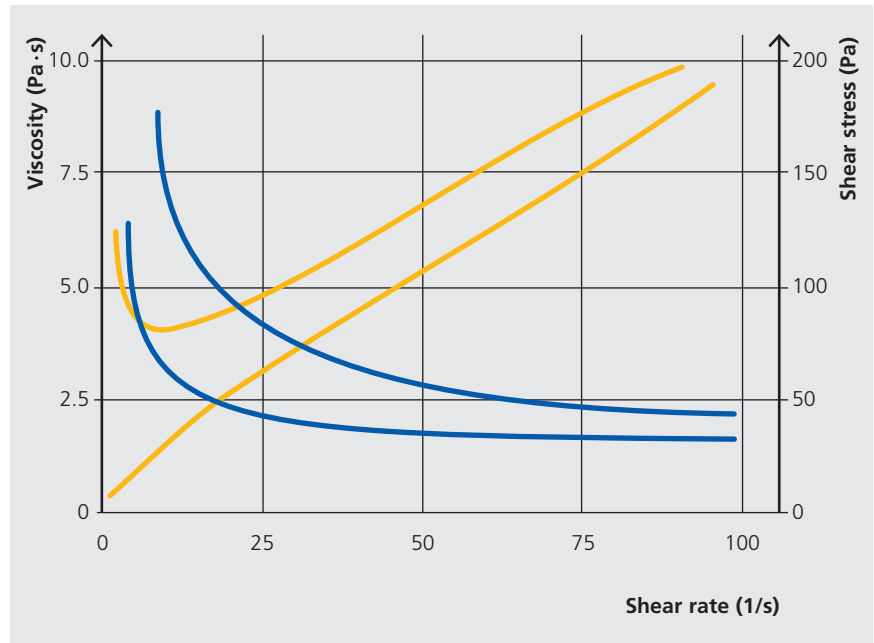


figure 3

## Pumpable



Bung hole in the center of the lid improves protection to atmospheric moisture when using a pump lance

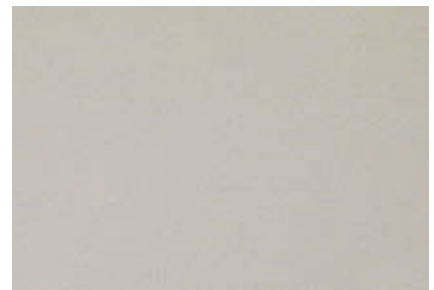
figure 4

## Application Example

Gelled PVC plastisol with 0.5% H<sub>2</sub>O



Without additive



With 0.8% BYK-2616

figure 5

## Application Fields

**BYK-2616**

is recommended for use in all PVC plastisols with exception of chemically foamed plastisols

figure 6



## Products and Applications

### BYK Additives

Additives are used during the production of coatings, printing inks and plastics to optimize the production process and to improve the quality of the final product.

#### 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
- Waxes
- Wetting and dispersing additives for pigments and extenders

#### Application Areas

- Ambient curing resins (FRP)
- Architectural coatings
- Automotive OEM
- Automotive refinishes
- Can coatings
- Coil coatings
- Color masterbatches
- Industrial coatings
- Leather coatings
- Marine paints
- Molding compounds
- Paper coatings
- Pigment concentrates
- Polyurethane foams
- Powder coatings
- Printing inks
- Protective coatings
- PVC plastisols
- Thermoplastics
- Wood and furniture coatings

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