

## BYK-1680

VOC-free, liquid defoamer for aqueous construction material applications, in particular in combination with concrete admixtures based on polycarboxylate ethers.

### Product Data

#### Composition

Polymer defoamer

VOC-free (< 1500 ppm)

#### Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Active substance: 100 %  
Density (20 °C): 1.04 g/ml  
Flash point: > 150 °C  
pH value: 4-7  
Supplied as: transparent liquid  
Miscibility: miscible in water and concrete plasticizers

#### Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit [www.byk.com](http://www.byk.com) for further information.

#### Storage and Transportation

Turbidity may occur during storage or transportation at temperatures below 10 °C. The turbidity has no influence on the effectiveness of the product, and dissolves in aqueous formulations.

### Applications

#### Construction chemicals

##### Special Features and Benefits

In particular, BYK-1680 is characterized by its good compatibility in aqueous construction material formulations.

- Very good miscibility and compatibility in water and in polymer solutions such as plasticizers and superplasticizers.
- No turbidity and phase separation
- Long-term stability, even at elevated storage temperatures
- Very good spontaneous and controlled long-term defoaming effect in concrete applications
- Improved flow behavior
- Post-addition to the end system possible without restrictions

**Recommended Use**

Particularly suitable for plasticizers that are primarily based on polycarboxylate ethers for use in

- ready-mix concrete,
- SCC,
- precast concrete elements and
- screeds.

**Recommended Levels**

0.025-0.5 % additive (as supplied) based on the total formulation.

For use in concrete plasticizers based on polycarboxylate ethers, we recommend an initial dosage of 0.2 % as supplied based on the plasticizer.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

**Incorporation and Processing Instructions**

BYK-1680 mixes very well with water and can be added directly to the plasticizer as supplied or to the concrete formulation at any time.



Additive Guide



**BYK-Chemie GmbH**  
P.O. Box 10 02 45  
46462 Wesel  
Germany  
Tel +49 281 670-0  
Fax +49 281 65735

[info@byk.com](mailto:info@byk.com)  
[www.byk.com](http://www.byk.com)

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®, CERAFAX®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PAPERBYK®, PERMONT®, POLYAD®, PRIEX®, PURE THIX®, RECYCLOBLEND®, RECYCLOSORB®, RECYCLOSTAB®, 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.

This issue replaces all previous versions – Printed in Germany