

## BYK-ET 3080

Binder for aqueous ceramic separator coatings for Li-ion cells or other energy technology applications.

### Product Data

#### Composition

Aqueous polyacrylate dispersion

#### Typical Properties

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

Density (20 °C):	1.07 g/ml
Solvents:	Water
Non-volatile matter (60 min., 105 °C):	50 %
pH value:	8
Electrochemical stability:	0.1 V to 4.8 V (vs. Li/Li <sup>+</sup> )

#### Storage and Transportation

Temperature sensitive. To be stored and transported between 10 °C and 40 °C. Separation possible. Mix well before use. Close container tightly after sampling.

### Applications

#### Energy Storage

##### Special Features and Benefits

BYK-ET 3080 is a highly effective binder for aqueous separator coatings based on ceramic materials like alumina and boehmite. The additive reinforces the adhesion strength, heat resistance, and mechanical strength of coated separators for Li-ion cells.

##### Recommended Levels

Amount of additive (as supplied) based upon:

Separator coating slurry: 0.5-6 %

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

##### Incorporation and Processing Instructions

BYK-ET 3080 should be added to the slurry after mixing the ceramic particles with other components such as water, wetting and dispersing additives, and defoamers. High shear forces with an increase in heat (e.g. by a bead mill) should be avoided to ensure a homogeneous mixture and good incorporation.



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

**info@byk.com**  
**www.byk.com**

ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-MAX®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, POLYAD®, PRIEX®, PURE THIX®, RECYCLOBLEND®, RECYCLOBYK®, RECYCLOSSORB®, RECYCLOSTAB®, RHEOBYK®, 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.