DISPERBYK-2180

VOC- and biocide-free wetting and dispersing additive for stabilizing inorganic pigments and fillers in aqueous coating systems, inkjet inks, printing inks, and pigment concentrates. Suitable for the entire pH range, including highly alkaline systems.

Product data

Composition
Aqueous solution of a polycarboxylate ether

VOC-free (< 1500 ppm)
Biocide-free

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

Density (20 °C):	1.17 g/cm³
pH value:	8.3
Non-volatile matter (10 min, 150 °C):	52 %
Solvent:	water
Acid value:	75 mg KOH/g
Delivery form:	liquid

Storage and transportation
Product shelf life in unopened original packaging: 36 months
To be stored and transported at a temperature below 50 °C. Separation or turbidity may occur at temperatures below 5 °C. In this case, warm to 30-40 °C and stir.

Applications

Coatings industry

Special features and benefits

- Deflocculation through electrosteric stabilization
- Suitable for the entire pH range, including highly alkaline systems
- Optimal pigment distribution
- Significant reduction in millbase viscosity, enabling higher pigment loading
- Specially developed for inorganic pigments and fillers
- High transparency with transparent iron oxides
- Good color strength when used in pigment concentrates
- Increased storage stability of the coating formulation

Recommended use
DISPERBYK-2180 is recommended for aqueous coating systems and pigment concentrates, and in particular for mineral paints such as dispersion silicate paints. It can be used across the entire pH range, including highly alkaline systems (pH > 11), and is particularly suitable for biocide- and VOC-free formulations.

Architectural coatings	■
Wood and furniture coatings	☐
Automotive OEM coatings	☐
Automotive refinish coatings	☐
General industrial coatings	☐
Marine and protective coatings	☐

■ especially recommended ☐ recommended

Recommended levels
Amount of additive (as supplied) based on:

Titanium dioxide:	1-6 %
Inorganic pigments:	10-30 %
Transparent iron oxides:	20-60 %
Fillers:	3-5 %

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the millbase before the incorporation of the pigments.

Inkjet inks

Special features and benefits
- Deflocculation through electrosteric stabilization
- Specially developed for inorganic pigments such as titanium dioxide, transparent iron oxides, and ceramic pigments
- Strong deflocculating effect, resulting in
    - High color strength and gloss
    - Low haze values
    - Small pigment particle size
    - Extremely low millbase viscosity
- Increased storage stability of pigment concentrates

Recommended use
DISPERBYK-2180 is recommended for use in aqueous inkjet inks as well as VOC- and resin-free pigment concentrates.

Recommended levels
Amount of additive (as supplied) based on:

Titanium dioxide:	5-20 %
Transparent iron oxides:	20-60 %
Inorganic pigments:	10-100 %*
Fillers:	10-100 %*

* Depending on the size and chemical nature of the particle

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the millbase before the incorporation of the pigments.

Printing inks

Special features and benefits

- Deflocculation through electrosteric stabilization
- Especially for titanium dioxide
- Strong deflocculating effect, resulting in
  - High color strength and gloss
  - Low haze values
  - Low millbase viscosity
- Increased storage stability of pigment concentrates

Recommended use
DISPERBYK-2180 is particularly suitable for aqueous VOC- and resin-free pigment concentrates and slurries for aqueous printing inks.

Aqueous printing inks	☐
Aqueous pigment concentrates	☐

■ especially recommended ☐ recommended

Recommended levels
1-5 % additive (as supplied) based on titanium dioxide.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the millbase before the incorporation of the pigments.

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