

TECHNICAL DATA SHEET

BR100 - BaSO₄

Low-viscous aqueous dispersion of tailor-made barium sulfate — a pigment-stabilizing additive for aqueous pigment formulations.

SUBSTANCE Barium sulfate	DISPERSANT Water	CONCENTRATION 33 – 37 % (w/w)	PH VALUE 7 – 11
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01 Description

BR100 is a low-viscous dispersion of tailor made Barium sulfate in water.

02 Fields of application

The dispersion is recommended for usage as a pigment stabilizing additive in pigment formulations. BR100 can be used in binder-free and binder-containing aqueous formulations.

Binder-free grinds — best results in combination with a wetting and dispersing additive at low dosage level. To increase dispersion stability, BR100 should be used in standard formulation together with the standard additive.

Binder-containing formulations — the barium sulfate dispersion can be employed as sole additive for pigment stabilization to prepare additive-free or minimal-additive formulations.

PARTICLE SYSTEM

Electrosterically stabilized barium sulfate nanoparticles with high stability in the pH-range of 4 – 11, high salt resistance and good compatibility with common pigment dispersion additives.

EFFECT ON MILLING

Upon milling, BR100 acts as a spacer and keeps the pigments separated during deaggregation and deagglomeration. This leads to reduced milling time, significantly reduced additive costs and a finer grind.

03 Technical data *

PROPERTY	TYPICAL VALUE
Appearance	Opaque liquid
Dispersant	Water
pH value	7 – 11
Concentration	33 – 37 % (w/w)
Conductivity	< 1 mS

* No specification data. Values indicated in this datasheet describe typical physico-chemical properties of the dispersion and do not define specification limits.

04 Processing instructions

- 01 Optimal use concentration should be evaluated by a ladder study. **20 % to 40 %** of barium sulfate (with respect to pigment concentration) should be sufficient for pigment stabilization in combination with an organic wetting additive.
- 02 Wetting and dispersive additives should be added to the millbase. The additive should be homogenized in the binder, solvent or reactive thinner before the pigment is added.
- 03 The dispersion is easily dispersible in water and should be added to the mill base prior to the addition of the pigments. The product should be thoroughly agitated in the product container before adding to the millbase.

05 Packaging

Sample size: upon request. Product size: 220 L drum, IBC.

06 Storage

Containers should be stored at ambient temperature at a dry place. Avoid freezing. Storage temperature: 5 – 25 °C. Under these conditions the shelf life is 6 months in closed original containers.

07 Labelling

The product is not classified according to CLP. Safety relevant information on handling and protective measures are given in our material safety datasheets.

08 – NOTES AND DISCLAIMER

All the above information about the product is to the best of the manufacturer's knowledge and has been published in good faith. However, the manufacturer does not guarantee the completeness and accuracy of the information contained in this document and is not liable for the consequences of its use. The user is obliged to verify and confirm it himself. The manufacturer recommends that users carry out their own preliminary tests, taking into account the conditions and intended use of the product, including the choice of the substrate. The manufacturer reserves the right to change the contents of this document at any time without giving reasons.

Issue 08/2026 nanoSaar Production GmbH