

BT-188

Organoclay Rheological Additive

Technical Data Sheet

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1. Product Description

BT-188 is a high-performance organophilic bentonite rheological additive designed for medium to high polarity solvent-based systems.

It provides excellent thickening efficiency, anti-settling performance, and thixotropic control. A polar activator is required to achieve optimum dispersion and maximum viscosity development.

2. Typical Physical & Chemical Properties

Property	Specification
Appearance	Light yellow free-flowing powder
Volatile content (105°C, 2h)	≤ 3.5%
Particle size (<76 μm, 200 mesh)	≥ 95%
Viscosity (7% xylene gel, 25°C)	≥ 3.5 Pa·s
Viscosity (5% 200# solvent gel, 25°C)	≥ 1500 mPa·s
Loss on ignition (850–900°C)	≤ 40%

The above values represent typical test results and are not intended for use as product specifications.

3. Key Features

- Strong thickening and rheology control
- Excellent anti-settling and sag resistance
- Good suspension stability
- Broad compatibility with solvent-based formulations
- Easy activation with polar activators
- Stable and consistent quality between batches

4. Recommended Applications

BT-188 is particularly suitable for solvent systems based on 200# solvent oil, coal tar, and aromatic hydrocarbons.

Typical applications include:

- Paints & coatings
- Printing inks
- Sealants
- Lubricating greases
- Blended paints
- Bituminous coatings
- Chlorinated rubber paints
- Epoxy coatings
- Anti-corrosion coatings
- Container coatings

5. Recommended Dosage

Typical addition level (based on total formulation):

Low viscosity systems	0.3 – 0.8%
Medium viscosity systems:	0.8 – 1.5%
High build / anti-settling systems	1.5 – 3.0%

Optimal dosage should be determined through laboratory testing according to the specific formulation.

6. Incorporation / Dispersion Procedure

For best performance, BT-188 should be properly dispersed and activated:

Pre-gel method (recommended)

Add solvent into mixing tank

Slowly add BT-188 under high-speed stirring

Disperse for 10–15 minutes

Add 30–50% polar activator (based on BT-188 weight, e.g., methanol, ethanol, propylene carbonate)

Continue high shear mixing to form a pre-gel

Add remaining formulation components

Direct addition method

BT-188 can also be added directly during grinding under high shear, followed by polar activator addition.

Adequate shear and activation are essential for full viscosity development.

7. Equivalent International Grades

Comparable to:

- Bentone® 52
- Claytone® HT
- Tixogel® VP
- Viscogel® B4 / B8

8. Packaging

Double-layer kraft paper bag with polyethylene inner liner or valve bag

Net weight: 25 ± 0.25 kg/bag

Customized packaging available upon request

9. Storage

Store in a dry, cool, and well-ventilated area

Recommended temperature: 0–30°C

Keep sealed to avoid moisture absorption

Shelf life: 24 months

10. Safety Information

Please refer to the Safety Data Sheet (SDS) before handling.

Avoid dust inhalation and use appropriate personal protective equipment.