

BT-871

Organophilic Bentonite

Rheological Additive

for High-Polarity Solvent Systems

Technical Data Sheet

Startriumph New Material Co., Ltd

Email: info@startriumph.com

www.startriumph.com

1. Product Description

BT-871 is an organophilic (organically modified) bentonite rheological additive supplied as a light yellow free-flowing powder.

It is specially designed for high-polarity solvent systems and provides excellent thickening and thixotropic performance in aromatic, ketone, alcohol, and mixed solvent systems.

Particularly effective in formulations containing a high proportion of alcohol or aromatic solvents.

2. Typical Physical & Chemical Properties

Property	Specification
Appearance	Light yellow free-flowing powder
Particle size (<76 μm , 200 mesh)	$\geq 95\%$
Viscosity (7% gel in xylene, 25°C)	$\geq 3.0 \text{ Pa}\cdot\text{s}$
Viscosity (xylene/n-butanol = 4/1 gel)	$\geq 1.0 \text{ Pa}\cdot\text{s}$
Volatile content (105°C, 2h)	$\leq 3.5 \%$
Loss on ignition (850–900°C)	$\leq 40 \%$

The above values represent typical test results and do not constitute a guaranteed specification.

3. Key Features

- Excellent thickening efficiency in high-polarity solvent systems
- Strong thixotropic behavior
- Enhanced viscosity development in alcohol-rich systems

- Good anti-settling and anti-sag performance
- Stable rheological control
- Suitable for aromatic/ketone/alcohol mixed solvent systems
- Requires polar activator for optimal performance

4. Recommended Applications

BT-871 performs particularly well in:

- Aromatic hydrocarbons
- Ketone-based systems
- Alcohol-containing systems
- Mixed solvent systems with high polarity

5. Applications

Widely used in:

- Anti-corrosion coatings
- Industrial paints
- Marine coatings
- Container coatings
- Anti-rust coatings
- Solvent-based protective coatings

6. Incorporation Method

- High-speed dispersion is required
- Use of polar activator (e.g., methanol/ethanol/water blends) is necessary
- Pre-gel addition method is recommended for optimal viscosity development

The optimal dosage should be determined through laboratory testing according to formulation requirements.

7. Comparable International Grades

Comparable to:

- BENTONE® -27

8. Packaging

- Double-layer kraft paper bag with PE inner liner
- Valve paper bag available
- Net weight: 25 ± 0.25 kg
- Custom packaging available upon request

9. Storage & Shelf Life

- Store in dry and ventilated conditions
- Recommended storage temperature: 0–30°C
- Keep container tightly sealed to prevent 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.