

# **BT-881**

Organophilic Bentonite  
Rheological Additive  
for Mineral Oil Systems  
**Technical Data Sheet**

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## 1. Product Description

BT-881 is an organophilic (organically modified) bentonite rheological additive supplied as a light yellow free-flowing powder.

It is specifically designed for mineral oil-based systems and provides excellent suspension, thixotropy, and stability performance in oil-based formulations.

## 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%
Colloidal yield (ml/2g)	≥ 95 ml

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

## 3. Key Features

- Excellent suspension capacity
- Strong thixotropic behavior
- Good anti-settling performance
- Stable rheological control in mineral oil systems
- Good thermal stability

## **4. Recommended Applications**

BT-881 is suitable for:

- Mineral oil-based drilling fluids
- Oil-based drilling muds
- Oil-based spotting fluids
- Invert emulsion mud systems

It contributes to:

- Effective cuttings suspension
- Improved carrying capacity
- Borehole wall stabilization
- Fluid loss control

## **5. Incorporation Method**

- High-speed dispersion is required
- Dry powder direct addition method is recommended
- Ensure sufficient shear for optimal viscosity development

The optimal dosage should be determined through laboratory testing according to the specific drilling fluid formulation and rheological performance requirements.

## **6. Thermal Stability**

BT-881 maintains stable physical and chemical properties under elevated temperature conditions encountered in drilling operations.

## **7. Comparable International Grades**

Comparable to:

- BENTONE® -990
- VG-69
- VERSA rheological grades

## **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**

- 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.