



## BENTEC ORGANOCLOYS PRIVATE LIMITED

ISO 9001 : 2015 Certified Company

### PRODUCT GUIDE

#### BENTEC PL-B *plus*

- Organically modified bentonite-based rheology control agent for latex coatings and a number of other aqueous systems. BENTEC PL-B *plus* provides excellent thixotropic thickening in a number of water-based coatings and other minerals. Especially useful where high viscosities are required in system with lower PVC's and higher water content.

| PHYSICAL PROPERTIES     |                                |
|-------------------------|--------------------------------|
| Appearance              | Tan Powder                     |
| Moisture                | 5 to 10%                       |
| Dispersed Particle Size | Minimum 90% less than 1 micron |
| Packing                 | 25 Kg PP bag with liner        |

### USE

- BENTEC PL-B *plus* is efficient thickener in a number of water-based systems including those where some polar and low molecular weight solvents are used, such as methanol, ethanol and glycol.
- BENTEC PL-B *plus* provides excellent sag control, maintains good leveling properties & provides good pigment suspension.
- BENTEC PL-B *plus* may be used in Sand Textured Matt, Acrylic based Exterior Paints, Cement Primer, Latex and Industrial Paints, adhesives paper coatings, textile backing, bath emulsions, cleaners and polishes.



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### **Incorporation**

#### **1. IN-SITU**

- Add to the water phase as early in the manufacturing process as possible.
- Use high speed mixing to encourage complete dispersion.
- Neutral or slightly acidic pH at this stage will usually result in better rheology in the finished product.
- Add remaining paint components after BENTEC PL-B *plus* has been dispersed.
- If pigments are to be ground into the system, some viscosity build may occur during the process. Subsequent addition of alkaline (pH-raising) additive, such as amine stabilizers may also enhance viscosity build.
- Anionic surfactant can enhance the thickening effect when used with BENTEC PL-B *plus*. Non-ionic surfactant may be used, though with little or no effect on clay; cationic, however, should be completely avoided, as they deactivate the clays in aqueous media.

#### **2. PREGEL :**

- Can be prepared by dispersing up to 3 to 5% of BENTEC PL-B *plus* in water with high speed mixing. It is best used after being allowed to stand at least one day. This pregel can be used to introduce the thickening agent to the paint formulation provided additional water can be tolerated. The pregel can also be used as post additive to adjust viscosity to the finished system.

### **NOTE**

- BENTEC PL-B *plus* is more resistant to bacterial/enzymatic degradation than some other organic or organically modified products.



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### CAUTION

- It is best to use BENTEC PL-B *plus* with soft or completely demineralized water, as the mineral components, of hard water can cause damaging interaction with the clay components, more so at higher level of hardness in water.
- Cationic surfactant must be avoided, as they react with clay to reduce effectiveness and to damage the coating preparations.

| Dosage of BENTEC PL-B <i>plus</i> |              |
|-----------------------------------|--------------|
| Acrylic Emulsion                  | 0.4% to 0.8% |
| Acrylic Distemper                 | 0.6% to 0.8% |
| Water base Cement Primer          | 0.4% to 0.5% |
| Textured Coatings                 | 0.4% to 0.6% |



**Cowles Blade**

### Disclaimer

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