

BENGEL[®] 968

Rheological additive

GENERAL INFORMATION

BENGEL 968 rheological additive is a general purpose organic bentonite designed for low to medium polarity coating systems. It can be used for versatile coating application and provides good compatibility, viscosity increase as well as anti-settling properties.

CHEMICAL & PHYSICAL PROPERTIES

Composition	organic derivative of a bentonite clay
Appearance	cream white powder
Bulk Density	0.34 - 0.36 g/cm ³
Moisture	≤ 3 %
LOI (loss on ignition)	30 - 33

These are typical properties not to be used for specification purposes.

APPLICATIONS

BENGEL 968 is designed for low to medium polarity paint systems.

- Interior / Exterior Architectural Coatings
- Protective / Anticorrosive Coatings
- Marine Coatings
- Container coatings
- Wood Coatings primer

KEY PROPERTIES

- Effectively increases low shear and mid shear viscosity
- Excellent sag resistance
- Effectively control pigment suspension both in storage and in transit
- Controls flooding and floating of colors
- Stabilizes the paint and prevents excessive penetration of the liquid components into porous substrates
- Cost effective
- Consistent batch to batch development of rheological properties

INCORPORATION

BENGEL 968 is recommended to be used in grinding stage.

Under high speed dispersion (e.g. high shear equipment, ball mills, sand mills) and the incorporation of a chemical activator are required to ensure optimum performance.

1. Vehicle/solvent (mix)
2. **BENGEL 968** (mix 10 minutes)
3. Chemical (polar) activator (mix 5 to 10 minutes)
4. Surfactant (if any in the formulation)
5. Pigment (grind to desired F.O.G.)
6. Let down

Types of Chemical (Polar) Activators	% based on the weight of dry BENGEL 968
Methanol / H ₂ O (95 / 5)	33 %
Ethanol / H ₂ O (95 / 5)	50 %
Propylene Carbonate / H ₂ O (95 / 5)	50 %
DAPRO BEZ 75	30 - 50 %

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A pregel of **BENGEL 968** is recommended to ensure optimum performance especially under optimum conditions of incorporation.

BENGEL 968 rheological additive can be incorporated into solvent-based coatings using either high shear or high speed types of processing equipment. Optimum gelling efficiency is obtained when the proper degree of mechanical, chemical and thermal energy is applied to the system. The processing equipment should provide sufficient amount of mechanical and thermal energy. The required chemical energy is supplied by a chemical (polar) activator.

LEVELS OF USE

Use levels are typically 0.2 to 2.0 % by weight of the system. The amount of **BENGEL 968** rheological additive required depends upon the type of coating system, a loading ladder study must be made to determine the optimum level of use.

HANDLING AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

STORAGE RECOMMENDATIONS

Keep container tightly closed in a dry and cool place.

SHELF LIFE

BENGEL 968 rheological additive has a shelf life of 4 (four) years from date of manufacture

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001/ ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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