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BENGEL[®] 908

Rheological additive for low to medium polarity solvent based coatings

GENERAL INFORMATION

BENGEL[®] 908 rheological additive is a general purpose organoclay designed for low to medium polarity aliphatic and aromatic coating systems. It also works well in other high polarity systems.

It is a highly cost effective rheological additive for low to medium polarity systems.

PHYSICAL PROPERTIES

Composition	Organic derivative of a bentonite clay
Colour	White
Form	Finely divided powder
Moisture	3.5% max
Viscosity (Pa·s) - 7% dispersion in xylene	≥ 2.5
Granularity (through 200 mesh)	≥ 95
LOI (loss on ignition)	33 – 35.5
FOG (dispersed in xylene)	≤ 70 microns

APPLICATIONS

BENGEL[®] 908 is designed for low to medium polarity paint systems. It performs well in the following systems

- Interior / Exterior Architectural Coatings
- Industrial Coatings
- Protective / Anticorrosive Coatings
- Wood Coatings primer
- Printing Ink
- Sealant putty
- Unsaturated polyester

BENGEL[®] 908 provide high transparency and light colour gel, it is highly recommended for transparent paint and will improve anti yellowing property.

KEY PROPERTIES

BENGEL[®] 908 Rheological Additive

Effectively increases low shear and mid shear viscosity

Offers an excellent balance between sag resistance and flow & levelling properties

Prevents pigment settling during storage

Controls flooding and floating

Stabilizes the paint and prevents excessive penetration of the liquid components into porous substrates

Consistent batch to batch development of rheological properties

Cost effective

Incorporation

BENGEL[®] 908 is recommended to be used in the grinding phase of a formulation. A typical manufacturing procedure would be as follows:

Under high speed dispersion

1. **Vehicle/solvent (mix)**
2. **BENGEL[®] 908 (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

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Chemical (Polar) Activators

Types of Chemical (Polar) Activators	% based on the weight of dry BENGEL [®] 908
Methanol/H ₂ O (95/5)	33%
Ethanol/H ₂ O (95/5)	50%
Propylene Carbonate/H ₂ O (95/5)	33%
DAPRO [®] BEZ 75	30 - 50%

A pregel of **BENGEL[®] 908** is recommended to ensure optimum performance especially under less than optimum conditions of incorporation.

BENGEL[®] 908 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

Recommended use level of BENGEL 908

The amount of **BENGEL[®] 908** rheological additive required depends upon the type of organic system and the degree of thickening or other rheology properties desired.

Typical **BENGEL[®] 908** use levels are 0.2% to 2.0% by weight of the total system. A loading ladder study must be made to determine the optimum level of use.

Effective incorporation technique and equipment will also play a role to optimise the use level.

Optimisation is always encouraged to gain maximum cost effectiveness.

REGULATORY

For the most current regulatory status, please refer to the BENGEL[®] 908 MSDS. It may be viewed and downloaded from our website at:

www.elementisspecialties.com

HANDLING AND SAFETY

More detailed information on handling and safety for each product is included in the relevant material safety data sheet, available for each product.

STORAGE RECOMMENDATIONS

Store in a cool, dry location

PACKAGING

BENGEL[®] 908 rheological additive is available in 25 kg multi-ply paper bags. Please contact your local Elementis Specialties representative for the packaging available in your region.

SHELF LIFE

BENGEL[®] 908 rheological additive has a shelf life of 4 (four) years from date of manufacture

PRODUCT NUMBER

12315

QUALITY ASSURANCE

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

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