

# RHEOTECH™ 3900

Acrylic associative thickener for water-based systems

## HASE Acrylic Thickener

### TYPICAL CHARACTERISTICS

Nature	<b>Aqueous dispersion of an acrylic copolymer</b>
Appearance	<b>Low viscous white milky liquid</b>
Solid Content (%)	<b>30</b>
Active Content (%)	<b>30</b>
pH	<b>3</b>
Specific gravity	<b>1.06</b>
Solvent	<b>Water</b>

### DESCRIPTION

Rheotech™ 3900 is an associative acrylic thickener designed to improve both the rheology and the color acceptance of water based formulations. Its outstanding effectiveness at medium shear rates allows to control very easily the perceived quality of paints during handling and to facilitate coating by roll or by bush, especially for finishing touches. Rheotech™ 3900 ensures safe additions of colorants in water based formulations, limiting viscosity changes and rub-out issues. Rheotech™ 3900 can be used in every kind of alkaline water based formulation and particularly in solvent and Alkyl Phenol Ethoxylate (APE) free formulations.

### RECOMMENDED ADDITION LEVEL

Rheotech™ 3900 can be used alone in formulation showing high PVC, e.g. matt paints, fillers and low cost formulations, at concentration between 0.1 and 0.6% (dry on total formulation weight) typically. Rheotech™ 3900 can also be used in combination with other rheology modifiers such as cellulosic ethers, Newtonian acrylic thickeners and polyurethane thickeners for an easy rheology adjustment of all kinds of water based formulations, e.g. one coat matt paints or silk paints (concentrations to use: 0.05 to 0.4%).

### STANDARD PACKAGING

Other packaging may be available upon request

- 1000L IBC
- 200L Drum
- Bulk

### HANDLING & STORAGE

It can be irreversibly altered by frost. It should be protected from the effects of weathering and stored between 5 and 40°C and protected from direct sun exposure. Once opened, packaging should be resealed immediately after use.

Film-forming product, surface may dry in contact with air. A slight sedimentation can be visible at the bottom of drums or totes. This phenomenon is normal and has no impact on the use and level of performance as long as the solids content of the product meets the specification. If necessary, filter the product prior to its use. In these conditions, this product should be used within 6 months from delivery.

### PROCESSING INSTRUCTIONS

Rheotech™ 3900 can be added under stirring at the end of formulation, after the binder incorporation, or alternatively into the millbase like cellulosic ether thickeners. The thickening effect is achieved once the pH of the formulation is brought to 8.5 to 9 using an alkali solution (sodium hydroxide, ammonium hydroxide, amines).

### MARKET

#### Coatings & Inks

- Architectural Coating
- Graphic Arts
- Industrial Coating
- Textile & Leather Coating

### KEY BENEFITS

#### FORMULATION

- **Color acceptance**
- **Compatibility**
- **Cost in use**



#### STORAGE

- **Syneresis resistance**
- **In-can appearance**
- **Viscosity stability**
- **Antisettling**



#### APPLICATION

- **Brushability**
- **Rollability**
- **Sprayability**



#### FILM PROPERTIES

- **Hiding power/Opacity**
- **Rub out**
- **Stain resistance**



### THICKENING MECHANISM

Non Associative  
Self Association



### VISCOSITY CONTRIBUTION

Low Shear contribution  
Mid Shear contribution



### PVC

PVC High  
PVC Mid

