# CRAYVALLAC® PF

Micronised hydrogenated castor oil rheology modifier
**Castor derivative**

## TYPICAL CHARACTERISTICS

| | |
|---|---|
| Nature | **Castor derivatives** |
| Appearance | **Off-white micronized powder** |
| Solid Content (%) | **100** |
| Active Content (%) | **100** |
| Specific gravity | **1.01** |
| Particle size distribution | **DV.2 min: 2 µm / DV.8 max: 10 µm** |

## DESCRIPTION

CRAYVALLAC® PF is a modified micronised hydrogenated castor oil rheology modifier specially designed to facilitate the incorporation in powder form for better activation and easier handling. The activation process is the conversion of the CRAYVALLAC® PF fine particles to an interacting network of fibers. It is this network that gives rise to the final system's shear thinning rheology. This shear-thinning behavior provides a very high viscosity under the low shear rates associated with sedimentation, and a low viscosity at the much higher application shear rates. The net result is excellent control of sedimentation combined with ease of application. CRAYVALLAC® PF is suitable for a multitude of applications.

## RECOMMENDED ADDITION LEVEL

0.2-3% under heat and shear

## STANDARD PACKAGING

Other packaging may be available upon request

- 15 Kg Bag

## HANDLING & STORAGE

It should be stored in the original containers in a dry place at temperatures between 5°C (41°F) and 30°C (86°F). Avoid exposure to direct sunlight or frost.
In these conditions, this product should be used within 48 months from production.

## PROCESSING INSTRUCTIONS

CRAYVALLAC® PF is best incorporated during the pigment dispersion stage using a high-speed disperser that generates both the necessary shear and temperature. The increased specific surface area available thanks to its finer particles contributes to obtain the maximum rheological performance. For instance in aliphatic solvent based coating, this maximum performance would be obtained for a 20 – 30 minutes long dispersion at a temperature of 30 – 55 °C (86 – 131 °F). The activation process is the conversion of the CRAYVALLAC® PF fine particles to an interacting network of fibers. It is this network that gives rise to the final system's shear thinning rheology. This shear-thinning behavior provides a very high viscosity under the low shear rates associated with sedimentation, and a low viscosity at the much higher application shear rates. The net result is excellent control of sedimentation combined with ease of application. The viscosity recovery is controlled so that the network reestablishes itself quickly but smoothly so as to both prevent sag and achieve a good levelling.

## HEALTH AND ENVIRONMENTAL DATA

For safe handling please refer to the Safety Data Sheet. For more information about health and environmental data, please contact us.

## MARKET

**Coatings & Inks**
- Architectural Coating
- Industrial Coating

**Adhesives & Sealants**
- Assembly
- Other Adhesives
- Sealants

## KEY BENEFITS

FORMULATION
- **Easy handling**
- **Ready to use**

STORAGE
- **Antisettling**
- **In-can appearence**
- **Syneresis resistance**
- **Viscosity stability**

APPLICATION
- **Edge-coverage**
- **Brushability**
- **Rollability**

FILM PROPERTIES
- **Gloss**
- **Levelling**
- **Transparency**

| | |
|---|---|
| **APEO free** | **Yes** |
| **Bacteria resistance** | **Yes** |
| **Bio content (%)** | **100** |
| **Heavy metal free** | **Yes** |
| **Solvent-free** | **Yes** |

## THICKENING MECHANISM

Non Associative

## VISCOSITY CONTRIBUTION

Low Shear contribution