CRAYVALLAC® PA4 WDA 12

Pre-activated amide rheology modifier dispersed in mineral spirit
Polyamide

TYPICAL CHARACTERISTICS

Nature	**Polyamide**
Appearance	**Off-white paste**
Solid Content (%)	**12**
Active Content (%)	**12**
Specific gravity	**0.88**
Solvent	**D60 and Alcohol**

DESCRIPTION

CRAYVALLAC® PA4 WDA 12 is a pre-activated amide wax supplied in a mixture of mineral spirit (D60) and alcohols. Under paste form for post addition to solvent-based low polarity coating systems, it provides a very simple and direct mean of introducing shear-thinning rheology with thixotropic viscosity recovery to coating formulations. It is a softer version than CRAYVALLAC® PA3 WDA 20 with enhanced ease of incorporation. It is also a very cost efficient alternative to organoclays. The shear-thinning characteristic provides a very high viscosity under the low shear rates and a low viscosity at the much higher application shear rates. The net result is excellent control of sedimentation combined with ease of application. Immediately following application, the coating's viscosity undergoes a time dependent recovery as the network re-establishes itself. This time dependence is known as thixotropy and enables the final coating to attain very good levelling.

RECOMMENDED ADDITION LEVEL

1.0-5.0% under low to medium shear dispersion

STANDARD PACKAGING

Other packaging may be available upon request

- 15 Kg Pail

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 24 months from production.

PROCESSING INSTRUCTIONS

In order to obtain maximum efficiency from CRAYVALLAC® PA4 WDA 12, it is necessary to disperse this product without destroying the crystalline fibres under low to medium shear conditions over as short a time period as possible. There are two main methods by which it can be incorporated: Post addition: Using a high-speed disperser, it is added during the final stages of production, when the coating has been partially thinned to a viscosity of 600-800mPas (ICI cone and plate at 10000s-1) and the peripheral speed reduced to approximately 4m.s-1. Too high a speed will result in destruction of the active fibres and reduced performance, whereas, too low a speed will result in extended incorporation times. In general, the time required for incorporation should be kept to a minimum in order to minimize damage due to overshear. Master batch: To be prepared by dispersing it in a resin and/or solvent using low to medium shear rates. This dispersion can then be added to the finished coating.

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

KEY BENEFITS

FORMULATION
- **Ready to use** ●●●●●
- **Easy handling** ●●●●○
- **Post addition** ●●●●○

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

APPLICATION
- **Edge-coverage** ●●●●●
- **Sprayability** ●●●●●
- **Temperature resistance** ●●●●●

FILM PROPERTIES
- **Gloss** ●●●●●
- **Levelling** ●●●●○
- **Pigment orientation** ●●●●○

- **APEO free** Yes
- **Bacteria resistance** Yes
- **Heavy metal free** Yes

THICKENING MECHANISM

Non Associative ●●●●●

VISCOSITY CONTRIBUTION

Low Shear contribution ●●●●●