# CRAYVALLAC® PA3 WDA 20

Pre-activated amide rheology modifier supplied in mineral spirit **Polyamide** 

## **TYPICAL CHARACTERISTICS**

Nature Polyamide
Appearance Off-white paste

Solvent D60 and Alcohol

## **DESCRIPTION**

CRAYVALLAC® PA3 WDA 20 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 shear-thinning rheology with thixotropic viscosity recovery to coating formulations. In coating systems, its crystalline fibres form an interacting network which gives rise to the shear-thinning rheology of the final coating. It 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. 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**

0.5-5.0% 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® PA3 WDA 20, it is necessary to disperse this product without destroying the crystalline fibres. It is therefore preferable to incorporate CRAYVALLAC® PA3 WDA 20 under low to medium shear conditions over as short a time period as possible. There are two main methods by which CRAYVALLAC® PA3 WDA 20 can be incorporated: Post addition: Using a high-speed disperser, CRAYVALLAC® PA3 WDA 20 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 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 overshear. Master batch preparation: To be prepared by dispersing CRAYVALLAC® PA3 WDA 20 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
- Sag resistance
- Sprayability



## FILM PROPERTIES

- Gloss
- Levelling
- Pigment orientation



APEO freeBacteria resistance

Heavy metal free

Yes Yes

Yes

## THICKENING MECHANISM

Non Associative



## **VISCOSITY CONTRIBUTION**

Low Shear contribution



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