

Pre-activated amide rheology modifier supplied in mineral spirit
Polyamide

Typical Characteristics

Nature	Polyamide
Appearance	Off-white paste
Solid Content (%)	20
Active Content (%)	20
Specific gravity	0.88
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 delivery.

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.

Coatings & Inks

- Architectural Coating
- Industrial Coating

Key Benefits

Formulation

- Ready to use
- Easy handling
- Post addition

Storage

- Antisettling
- In-can appearance
- Syneresis resistance

Application

- Edge-coverage
- Sag resistance
- Sprayability

Film Properties

- Gloss
- Levelling
- Pigment orientation

APEO free:	Yes
Bacteria resistance:	Yes
Bio content (%):	17
Heavy metal free:	Yes

Thickening mechanism

Non Associative	●●●●●●
Self Association	○○○○○○
Associative	○○○○○○

Viscosity contribution

Low Shear contribution	●●●●●●
Mid Shear contribution	●●○○○○
High Shear contribution	○○○○○○