

# CRAYVALLAC® PA4 X 20

Pre-activated amide rheology modifier supplied in xylene  
**Polyamide**

## TYPICAL CHARACTERISTICS

Nature	<b>Polyamide</b>
Appearance	<b>Off-white paste</b>
Solid Content (%)	<b>20</b>
Active Content (%)	<b>20</b>
Specific gravity	<b>0.88</b>
Solvent	<b>Xylene and Alcohol</b>

## DESCRIPTION

CRAYVALLAC® PA4 X 20 is a rheology modifier pre-activated amide wax supplied in a mixture of xylene and alcohol. It is a rheology modifier in paste form with enhanced transparency, excellent anti-sagging and anti-settling properties. CRAYVALLAC® PA4 X 20 is supplied in the form of crystalline fibres. In a coating system, these fibres form an interacting network. This network gives rise to the shear thinning rheology of the final coating. This shear thinning characteristic 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.

## RECOMMENDED ADDITION LEVEL

0.5-5.0% under medium shear

## 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 X 20, it is necessary to disperse this product without destroying the crystalline fibres. It is therefore preferable to incorporate CRAYVALLAC® PA4 X 20 under low to medium shear conditions over as short a time period as possible. CRAYVALLAC® PA4 X 20 can be incorporated either by post-addition or by a masterbatch method. Post addition: When using a high-speed disperser, CRAYVALLAC® PA4 X 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 4ms-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 minimise damage due to overshear. Master batch preparation: A master batch can be prepared by dispersing CRAYVALLAC® PA4 X 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

- Graphic Arts
- Industrial Coating
- Textile & Leather Coating

## KEY BENEFITS

### FORMULATION

- **Ready to use**
- **Easy handling**
- **Post addition**



### STORAGE

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



### APPLICATION

- **Edge-coverage**
- **Sag resistance**
- **Sprayability**



### 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

