CRAYVALLAC®

TECHNICAL DATA SHEET

# CRAYVALLAC® PA4 X 20

Pre-activated amide rheology modifier supplied in xylene

**Polyamide**

17% bio-based product

## TYPICAL CHARACTERISTICS

| | |
|---|---|
| Nature | **Polyamide** |
| Appearance | **Off-white paste** |
| Solid Content (%) | **20** |
| Active Content (%) | **20** |
| Specific gravity | **0.88** |
| Solvent | **Xylene and Alcohol** |
| Total Bio content (%) | **17** |

## 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.

## MARKETS

**Coatings & Inks**
- Graphic Arts
- Industrial Coating
- Textile & Leather 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
- Transparency

SAFER SOLUTIONS
- APEO Free*
- Heavy Metal Free*

** Not intentionally added but not specifically measured (not part of product specification)*

- Total Bio content (%) **17**

## THICKENING MECHANISM

Non Associative

# CRAYVALLAC® PA4 X 20

## 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.

## VISCOSITY CONTRIBUTION

Low Shear contribution
Mid Shear contribution

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