

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 appearance
- 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 ●●●●●●

Headquarter: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80