CRAYVALLAC®
BIO-BASED

TECHNICAL DATA SHEET

CRAYVALLAC® PRIME

Micronised polyamide rheology modifier for very high-solids and solvent-free systems

Polyamide

98% bio-based product

Designed for low VOC systems with diluents

TYPICAL CHARACTERISTICS

Nature	**Polyamide**
Appearance	**Off-white micronized powder**
Solid Content (%)	**100**
Specific gravity	**0.99**
Particle size distribution	**DV. 1 min: 1.6 µm / DV. 9 max: 15.5 µm**
Bulk density	**0.4-0.6**
Total Bio content (%)	**98**

DESCRIPTION

CRAYVALLAC® PRIME is a high performance, micronised amide wax rheology modifier suitable for very high-solids and solvent-free applications. CRAYVALLAC® PRIME overcomes the difficulties which exist with hydrogenated castor oil based rheology modifiers e.g. seeding and false-body. Consequently, coatings formulated using CRAYVALLAC® PRIME exhibit an enhanced performance such as controlled flow behavior, ease of application and excellent sag resistance. Its very high efficiency allows to reach very strong shear thinning that can result either in very high sag resistance or interesting balance between viscosity and sag resistance. Therefore CRAYVALLAC® PRIME is for instance highly recommended in the case of solvent-free coatings with relatively low viscosity. It prevents the use of specific equipment for the application that are necessary with more viscous solvent-free coatings. The robustness of CRAYVALLAC® PRIME with a wide range of reactive and non-reactive diluents makes it the best candidate for low VOC 2K epoxy coatings.

RECOMMENDED ADDITION LEVEL

0.2-1.5% under heat and shear

STANDARD PACKAGING

Other packaging may be available upon request

- 15 Kg Bag

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 48 months from production.

MARKETS

COATINGS & INKS
- INDUSTRIAL COATING
  - GENERAL INDUSTRY
  - PROTECTIVE AND MARINE COATING

KEY BENEFITS

FORMULATION
- Easy handling ●●●●○

STORAGE
- Antisettling ●●●●●
- In-can appearence ●●●●●
- Syneresis resistance ●●●●●
- Viscosity stability ●●●●●

APPLICATION
- Edge-coverage ●●●●●
- Sag resistance ●●●●●
- Sprayability ●●●●●

FILM PROPERTIES
- Anticorrosion ●●●●●
- Gloss ●●●●○
- Levelling ●●●●○

SAFER SOLUTIONS
- APEO Free*
- Heavy Metal Free*
- Solvent Free*

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

- Total Bio content (%) **98**

THICKENING MECHANISM

Non Associative ●●●●●

VISCOSITY CONTRIBUTION

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

CRAYVALLAC® PRIME

PROCESSING INSTRUCTIONS

CRAYVALLAC® PRIME is ideally incorporated and activated using a high-speed disperser. The use of high-speed dispersers is ideal in that they generate both the necessary and temperature required for full dispersion and activation. CRAYVALLAC® PRIME is best added along with the initial charge of resin during the pigment dispersion and grind stage. Efficient activation will be achieved by allowing the temperature during this dispersion process to rise to 50 - 65°C (122 - 149°F), but more preferably from 60 - 65°C (140 - 149°F). This condition of dispersion and temperature control should be maintained for 20 - 30 minutes to ensure full activation. The activation process constitutes the conversion of CRAYVALLAC® PRIME particles to an interacting network of crystalline fibres. It is this network that gives rise to the final coating's shear thinning rheology. 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 shear rates. The net result is excellent control of sedimentation combined with ease of application.

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.

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