

TECHNICAL DATA SHEET

CRAYVALLAC® ULTRA

Micronised polyamide rheology modifier with excellent sag control

Polyamide



86% bio-based product

TYPICAL CHARACTERISTICS

Nature	Polyamide
Appearance	Off-white micronized powder
Solid Content (%)	100
Active Content (%)	100
Specific gravity	0.98
Particle size distribution	DV. 1 min: 1.5 µm / DV. 9 max: 15.0 µm
Bulk density	0.4-0.6
Melting Point (°C)	121
Total Bio content (%)	86

DESCRIPTION

CRAYVALLAC® ULTRA is a pure polyamide especially recommended in 2K epoxy primers for its robustness. CRAYVALLAC® ULTRA is a micronised amide wax rheology modifier offering very good recoatability for ambient curing solvent-based epoxy coatings. CRAYVALLAC® ULTRA has been designed to overcome those difficulties which exist with older type organo-wax rheology modifiers e.g. seeding, false-body and migration of readily dissolved species to the surface. Consequently, when used in strong solvent systems, coatings formulated using CRAYVALLAC® ULTRA offer an enhanced performance and very good recoatability.

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

KEY BENEFITS

FORMULATION

- Easy handling



STORAGE

- Antisettling
- In-can appearance
- 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 (%)

86

THICKENING MECHANISM

Non Associative



VISCOSITY CONTRIBUTION

Low Shear contribution



Mid Shear contribution



CRAYVALLAC® ULTRA

PROCESSING INSTRUCTIONS

The use of high-speed dispersers is ideal for the incorporation and activation of CRAYVALLAC® ULTRA in that they develop both the necessary level of shear and temperature. CRAYVALLAC® ULTRA 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 dispersion to rise to 45 - 65°C (113 - 149°F), but more preferably from 55 - 65°C (131 -149°F), and maintaining this condition of dispersion and temperature for 20 - 30 minutes. The activation process constitutes the conversion of the CRAYVALLAC® ULTRA particles to an interacting network of fibre-like particles. 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 application shear rates. The net result is excellent control of sedimentation combined with ease of application. Immediately following application, where low shear conditions again predominate, the coating's viscosity undergoes a time dependent recovery as the network reestablishes itself. This time dependence is known as thixotropy and enables the final coating to attain very good levelling and sag resistance.

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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