

CRAYVALLAC® LV

Micronised polyamide rheology modifier for solvent-free systems

Polyamide

Typical Characteristics

Nature	Polyamide
Appearance	Off-white micronized powder
Solid Content (%)	100
Active Content (%)	100
Specific gravity	0.99
Bulk density	0.4-0.6
Melting Point (°C)	130
Particle size distribution	DV. 1 min: 1.8 µm / DV. 9 max: 15.0 µm

Description

CRAYVALLAC®LV is a high performance, micronised amide wax rheology modifier suitable for very high-solids and solvent-free applications. CRAYVALLAC® LV overcomes those difficulties which exist with hydrogenated castor oil based rheology modifiers e.g. seeding and false-body. Consequently, coatings formulated using CRAYVALLAC® LV exhibit an enhanced performance such as controlled flow behavior, ease of application and excellent sag resistance. Its very high efficiency even when activated 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® LV 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.

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 delivery.

Processing instructions

CRAYVALLAC® LV 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® LV 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® LV 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.

Key Benefits

Formulation

- Easy handling

Storage

- Antisettling
- In-can appearance
- Syneresis resistance

Application

- Edge-coverage
- Sag resistance
- Sprayability

Film Properties

- Anticorrosion
- Gloss
- Levelling

APEO free: Yes

Bacteria resistance: Yes

Bio content (%): 93

Heavy metal free: Yes

Solvent-free: Yes

Thickening mechanism

Non Associative	●●●●●
Self Association	○●●●○
Associative	○●●○

Viscosity contribution

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