

CRAYVALLAC® LA-150

Liquid urea rheology modifier for post-addition to solvent based systems

Urea urethane

Typical Characteristics

Nature	Urea urethane
Appearance	Clear liquid
Solid Content (%)	52
Active Content (%)	52
Specific gravity	1.11
Solvent	DMSO
Viscosity	300-700 (Viscosity (mPas) at 10000s-1 @25°C)
Color	< 7 (Gardner)

Description

CRAYVALLAC® LA-150 is a new pourable liquid rheology modifier supplied in Dimethylsulfoxide (DMSO) for post addition to solvent based systems. CRAYVALLAC® LA-150 is a post-addition rheology modifier composed of a modified urea dissolved in DMSO. When added to the final system, the DMSO is diluted and the modified urea crystallizes out as very fine fibres which build into a three-dimensional interacting network. It is this network that gives rise to the system's shear thinning rheology and time dependent viscosity recovery. The result is excellent control of sedimentation combined with ease of application.

Immediately following application, where low shear conditions again predominate, the system's viscosity undergoes a time dependent recovery as the network re-establishes itself. This time dependency is known as thixotropy and enables the final system to attain very good levelling.

Recommended addition level

0.2-2.0% under low shear dispersion, Post-addition.

Standard Packaging

Other packaging may be available upon request

- 200 Kg Drum
- 25 Kg Pail

Handling & Storage

It should be stored in the original containers in a dry place at temperatures between 20°C (68°F) and 30°C (86°F). Use corrosion-resistant storage tanks and piping. Avoid exposure to direct sunlight or frost.

Containers must be tightly closed after use to exclude moisture. The absorption of moisture will result in the premature crystallization of the modified urea. In these conditions, this product should be used within 12 months from delivery.

Processing instructions

CRAYVALLAC® LA-150 should be added to the coating as a slow stream under low to medium shear conditions to ensure efficient dispersion. Although efficient, stirring is required to ensure homogeneity; elevated temperatures are not required for activation. Addition to very polar and non-polar systems may result in incompatibility. This will reflect itself in poor anti-settle and sag resistance performance or seeding due to the crystals clumping together. Therefore it is essential to check compatibility, and if necessary optimise the Solvent-balance. CRAYVALLAC® LA-150 contains chloride ions. If this product is stored in metal containers, or is used in coatings intended for direct contact with metal substrates, additional testing is recommended to assess the potential of these ions for corrosion.

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
- Post addition
- Ready to use

Storage

- Antisettling
- In-can appearance
- Syneresis resistance

Application

- Brushability
- Rollability
- Temperature resistance

Film Properties

- Gloss
- Levelling
- Transparency

APEO free: Yes

Bacteria resistance: Yes

Thickening mechanism

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

Viscosity contribution

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

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