

COATING RESINS

TECHNICAL DATA

CRAYVALLAC SUPER

SALES SPECIFICATION

Particle size distribution:
(Malvern Mastersizer S laser particle size analyser) (CR 005)

DV.1 min. 1.8 μm
DV.9 max. 15.0 μm

Capillary Melting Point (CR 003) 120 - 130°C
(248 - 266°F)

OTHER PROPERTIES

Density at 25°C (77°F), g/cm³ (CR 006) 0.98

Bulk density, g/cm³ (CR 016) 0.4-0.6

Appearance Off white powder

PRODUCT INFORMATION

CRAYVALLAC SUPER is a high performance, micronised amide wax rheology modifier suitable for a wide range of solvent-based, high-solids and solvent-free applications. The performance benefits of this product are:

- 100% Active
- Imparts shear thinning rheology with thixotropic viscosity recovery
- Excellent sag resistance
- Very good anti-settle properties
- Good storage stability

CRAYVALLAC SUPER overcomes those difficulties which exist with hydrogenated castor oil based rheology modifiers e.g. seeding and false-body. Consequently, coatings formulated using **CRAYVALLAC SUPER** exhibit an enhanced performance.

the conversion of the **CRAYVALLAC SUPER** 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 re-establishes itself. This time dependence is known as thixotropy and enables the final coating to attain very good levelling.

The following table gives general temperature guidelines for the high-speed disperser activation of **CRAYVALLAC SUPER** in various solvent systems:

RECOMMENDED AMOUNTS

Anti-Settling and Sag Resistance 0.5 – 1.5%

Dearomatised mineral spirits	55 - 60°C (131 - 140°F)
Mineral spirits	50 - 55°C (122 - 131°F)
Aromatic hydrocarbons	40 - 50°C (104 - 122°F)
Aromatic hydrocarbon/ Alcohol blends	40 - 50°C (104 - 122°F)
Aromatic hydrocarbon/ Glycol ether blends	40 - 50°C (104 - 122°F)
Aromatic hydrocarbons/ Ester blends	40 - 50°C (104 - 122°F)
Solvent-Free	55 - 65°C (131 - 149°F)

INCORPORATION METHODS AND PROCESSING INSTRUCTIONS

CRAYVALLAC SUPER is best incorporated and activated using a high-speed disperser. It is usually 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 – 60°C (122 - 140°F) depending on the coating system characteristics. For the best results this condition of dispersion and temperature should be maintained for 15 – 30 minutes.

The use of high-speed dispersers is ideal in that they generate both the necessary shear and temperature required for full dispersion and activation. The activation process constitutes

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For the stronger solvent systems such as xylene blended with alcohols, glycol ethers or esters it may be possible to use **CRAYVALLAC ULTRA** in the place of **CRAYVALLAC SUPER**. This would lead to greater confidence with regard to false-body and seeding issues.

With moisture cured methoxysilane based sealants, we strongly recommend that all additives be quickly dispersed and not allowed to remain in direct contact with the resin component. Prolonged contact may sometimes result in the formation of an insoluble fine skin which later appears as small particles in the final sealant.

Due to the multitude of formulations, processing methods and application conditions used in the field, we strongly recommend that all products containing **CRAYVALLAC SUPER** be tested thoroughly to ensure their suitability for their intended end use. In particular, application in poorly ventilated areas, or on hot substrates, or by hot spray, may require additional attention. For ambient curing solvent-based epoxy coatings we recommend the use of **CRAYVALLAC ULTRA**.

PRECAUTIONS FOR STORAGE

CRAYVALLAC SUPER 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. Under these conditions the product may be stored for up to 4 years from production date.

PRECAUTIONS FOR USE

Please refer to the corresponding Safety Data Sheet.