CRAY VALLEY

COATING RESINS

TECHNICAL DATA — CRAYVALLAC ULTRA

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

OTHER PROPERTIES

Density at 25°C (77°F), g/cm^3 (CR 006)	0.98
Bulk density, g/cm^3 (CR 016)	0.4-0.6
Appearance	White powder
Capillary Melting Point (CR 003)	121°C (250°F)

PRODUCT INFORMATION

CRAYVALLAC ULTRA is a new high performance micronised amide wax rheology modifier offering very good recoatability for ambient curing solvent-based epoxy coatings. The performance benefits of this product are:

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

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 AMOUNTS

Anti-Settling and Sag Resistance	0.5 - 1.5%

INCORPORATION METHODS AND 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 re-establishes itself. This time dependence is known as thixotropy and enables the final coating to attain very good levelling and sag resistance.

Due to the multitude of formulations, processing methods and application conditions used in the field, we strongly recommend that all products containing **CRAYVALLAC ULTRA** 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.

PRECAUTIONS FOR STORAGE

CRAYVALLAC ULTRA 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.

CRAY VALLEY, 12 PLACE DE L'IRIS. LA DEFENSE 2, IMMEUBLE IRIS. F92062 PARIS LA DEFENSE CEDEX
Telephone: (+33) 1 47 96 98 50; Fax: (+33) 1 47 96 99 81
www.crayvalley.com