

CRAYVALLAC[®] ANTISETTLE CVP

Micronized Hydrogenated Castor Oil Rheology Modifier

Product Benefits

CRAYVALLAC[®] ANTISETTLE CVP is a micronized hydrogenated castor oil rheology modifier for aliphatic solvent-based coatings.

CRAYVALLAC[®] ANTISETTLE CVP meets FDA 175.300 requirements but this statement does not imply a blanket approval. The end user should refer to the specific FDA 175.300 regulation for details including extraction limitations and restrictions on the use of the product.

CRAYVALLAC[®] ANTISETTLE CVP is best incorporated during the pigment dispersion stage using a high-speed disperser operating at no greater than 55°C (131°F). In order to obtain the maximum performance from CRAYVALLAC[®] ANTISETTLE CVP, the dispersion process should be maintained for a period of 20 – 40 minutes at a temperature of 30 – 55°C (86 - 131°F).

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 the conversion of the CRAYVALLAC[®] ANTISETTLE CVP particles to an interacting network of fiber 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.

Activation at temperatures less than 30°C (86°F), or greater than 55°C (131°F), or for too short a time will result in the formation of an inefficient interacting network. Too low a temperature and too short a time results in under-activation, while too high a temperature results dissolving of the fibrous network.

Partial dissolving of CRAYVALLAC[®] ANTISETTLE CVP during coating manufacture manifests itself on cooling in the form of seeding. This is the result of dissolved material crystallizing out in an uncontrolled manner. As with all rheology modifiers based on hydrogenated castor oil, coatings prepared using CRAYVALLAC[®] ANTISETTLE CVP may sometimes develop an excessively high structure, or falsebody. This results when the hot coating is allowed to cool in the absence of stirring. This effect is minimized by cooling the coating with stirring to less than 40°C (104°F), or more preferably to less than 30°C (86°F), prior to discharge. Fortunately, this false-body phenomenon is a temporary effect and can be removed by the application of shear. Due to the potential for false-body to occur, care must be taken to ensure that process and quality control tests are not carried out on affected samples. This is best achieved by preconditioning all samples by mechanical stirring for several minutes prior to testing.

In addition to coatings applications, CRAYVALLAC[®] ANTISETTLE CVP has also been used successfully in a multitude of other applications such as inks, adhesives, mastics, caulks, sealants, fillers, greases and lubricants.

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Recommendations for Use	Anti-Settle and Sag Resistance 0.2 – 1.5%
Performance Benefits	<ul style="list-style-type: none">• 100% Active• Imparts shear thinning rheology with thixotropic viscosity recovery• Very good sag resistance• Very good anti-settle properties• Good recoatability
Sales Specifications	Particle size distribution: (Malvern Mastersizer S laser particle size analyser) (CR 005)
	DV.2 min. 4 µm
	DV.8 max. 20 µm
Other Properties	Density at 25°C (77°F), g/cm ³ (CR 006) 1.01
	Bulk density, g/cm ³ (CR 016) 0.4-0.6
	Appearance White powder

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Product Safety

Before handling the materials listed in this bulletin, read and understand the product MSDS (Material Safety Data Sheet) for additional information on personal protective equipment and for safety, health and environmental information. For environmental, safety and toxicological information, contact our Customer Service Department at 1-866-837-5532 to find an MSDS, or visit our web site: www.arkemacoatingresins.com

No chemical should be used as or in a food, drug, medical device, or cosmetic, or in a product or process in which it may contact a food, drug, medical device, or cosmetic until the user has determined the suitability and legality of the use. Since government regulations and use conditions are subject to change, it is the user's responsibility to determine that this information is appropriate and suitable under current, applicable laws and regulations.

Arkema Coating Resins requests that the customer read, understand, and comply with the information contained in this publication and the current MSDS(s). The customer should furnish the information in this publication to its employees, contractors, and customers, or any other users of the product(s), and request that they do the same.

Storage and Handling

Follow procedures typically recommended for polymer dispersions. Use corrosion-resistant storage tanks and piping. Air-operated diaphragm pumps are preferred. Avoid temperature extremes. Do not freeze; store between 5°-30°C. Under these conditions the product may be stored for up to 4 years.



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