

OMICURE® DDA 5

Ultra-Micronized Dicyandiamide
CAS No. 461-58-5

DESCRIPTION

OMICURE® DDA 5 is an ultra-micronized grade of dicyandiamide, a solid latent curing agent for epoxy resins. It has a mean particle size of approximately 4 microns and is one of several grades of Dicyandiamide offered by CVC Thermoset Specialties that differ in particle size. OMICURE DDA 5 contains approximately 2%-3% silica as an anticaking aid. OMICURE DDA5 typically cures epoxy more quickly than other grades of dicyandiamide.

OMICURE DDA 5, like other grades of dicy, is dispersed into a resin system where it remains stable until activated by heat. Without an accelerator, such as a substituted urea, dicyandiamide has an activation temperature of about 350 °F and a formulated storage stability of over six months. When catalyzed with a latent accelerator, like one of the OMICURE U series of substituted ureas, one-component adhesive and sealant formulas can be prepared with cure temperatures of 225-250 °F and excellent stability. The ultrafine particle size of OMICURE DDA 5 will help to aid good dispersion, prevent settling, maximize reactivity, promote uniform cure to formulated systems, and avoid issues of 'hot spots.'

Epoxy systems cured with OMICURE DDA 5 are characterized by outstanding adhesion, making it a preferred choice for adhesive formulations. OMICURE DDA 5 is compatible with all epoxy resins, including bisphenol A and F epoxies and epoxy novolacs, can be used with diluted or undiluted resins, and is compatible with a wide variety of fillers and pigments. OMICURE DDA 5 is safe to handle and is considered nontoxic.

APPLICATIONS

- Advanced composites and prepregs
- One-component adhesives
- Epoxy powder coatings
- Film adhesives
- Electronic potting and encapsulating compounds

TYPICAL PROPERTIES

Appearance	White crystalline powder
Onset Melting Point, °C	207 – 212
Melamine Content, max %	1.5
Moisture Content, loss @ 105 °C, max %	0.5
Particle Size, % < 7 μ	> 50
Particle Size % < 10 μ	> 90

PACKAGING & AVAILABILITY

OMICURE DDA 5 is available in plastic-lined corrugated cardboard boxes (40 lb net).

HEALTH & SAFETY PRECAUTIONS

OMICURE DDA 5 is not flammable, corrosive or explosive. Dicyandiamide will decompose slowly above 80 °C in water to generate ammonia, so material should be kept dry and away from steam pipes or excessively hot areas. While OMICURE DDA 5 is not a primary skin or eye irritant, epoxy resins in which it is used can produce irritation. Removal with soap and water is sufficient. Avoid using solvents as these can dry the skin and increase the irritation potential of epoxy resins.

Refer to CVC Thermoset Specialties Material Safety Data Sheet on OMICURE DDA 5 for additional safety and health information. The MSDS is revised as new data becomes available.

DISCLAIMER

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