TECH DATA SHEET

EC-312



$$O = CH_3 C O$$

$$CH_3 C$$

$$CH_3$$

DESCRIPTION

EC-312 is a Bisphenol A based phenyl-ester epoxy curative. This low-cost phenyl ester curative retains the features and benefits of the unique DMI phenyl ester curative line, namely:

- They are ideal for chain extension. Depending on the epoxy to curative ratios, the cured properties of formulated products can range from tough thermosets to thermoplastics.
- They are soluble in most epoxy monomers.
- They generally provide increases in curing latency.

When compared to materials formulated with traditional phenolic curatives EC-312 provides significant benefits:

- It will reduce the viscosity of formulated products.
- The curative provides thermosets with low moisture uptake
- EC-312, unlike phenolic curatives, does not interfere with free-radical cure when used in hybrid-cure systems.

HIGHLIGHTS

· Hydrolytically resistant

Hydrophobic

• Does not impede free-radical cure

Toughener

Thermal stability

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Fine white powder
Melting Point (typical)	DSC	91 - 94°C
Purity	GPC	≥ 98%
Functionality		2
Molecular Weight		312.36 daltons
Recommended Storage Temp		25°C or below

Data is for reference only and may vary depending on testing method used. The structure shown above is an idealized representation of a statistical distribution.

RECOMMENDED FORMULATION USE:

EC-312 is recommended for use as an epoxy curative to improve toughness, hydrophobicity, and hydrolytic stability. A one-to-one equivalent ratio of EC-312 to a difunctional epoxy will (depending on the catalyst used) cure to a thermoplastic resin. To form a thermoset, a twenty equivalent percent excess, or more, of epoxy is recommended. Standard epoxy catalysts such as amines, imidizoles, and Lewis acids work well to cure the EC-312 with epoxy resins.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support

858-348-1122

REF: DMI Part Number: R1227

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