

Kane Ace® MX 416

25% Core Shell Rubber in multifunctional epoxy resin based on tetraglycidylmethylenedianiline (TGMDA)

Description:

Kane Ace® MX 416 is a 25% concentrate of core shell rubber (CSR) toughening agent in tetra-glycidyl-methylene di-aniline (TGMDA). The CSR of MX 416 is based on a lower Tg rubber component which provides more toughening than standard CSR compositions. MX 416 is stable and the CSR remains completely dispersed under normal handling, formulating and curing conditions. The concentrate can be mixed or diluted with a variety of epoxy resins and diluents.

The resulting composite exhibits improved fracture toughness as neat resin as well as when reinforced with fiberglass or carbon fiber without sacrificing glass transition temperature or other thermal properties related to the cross-link density. The MX 416 product is also free of ionic and organic contaminants.

Applications:

Kane Ace® MX 416 is suitable for use in the production of composites from prepregs, filament winding, pultrusion, resin

transfer molding and VARTM processes. Other applications include adhesives and copper-clad laminates. Please see your Kaneka representative for more detailed information on applications.

Curing Agents:

Kane Ace® MX 416 is compatible with typical curing agents for composites including diaminodiphenylsulfone (DDS) and dicyandiamide (dicy).

Storage Conditions:

Kane Ace® MX 416 is suitable for use for at least 12 months from the date of manufacture when stored in the original, unopened container. The product must be stored at less than 10°C to prevent aging and must not be heated above 80°C as the TGMDA will undergo self homopolyaddition.

Handling Precautions:

Safe practices and procedures as outlined in the applicable MSDS must be followed.

Characteristics (preliminary data):

Appearance:	Uniform, blue/yellow clear liquid.
CSR Content:	25 +/- 1 wt%
Epoxy Equivalent Weight:	148 +/- TBD g/eq.
Viscosity @ 50°C:	49,000 +/- TBD cps
Flash point:	>220 °C
Density:	1.1

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