

Kane Ace® MX 451

25% Core Shell Rubber in multifunctional epoxy resin based on triglycidylparaaminophenol (TGPAP)

Description:

Kane Ace® MX 451 is a 25% concentrate of core shell rubber (CSR) toughening agent in the tri-glycidyl ether of para-aminophenol (TGPAP). MX 451 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 both as neat resin and when reinforced with fiberglass or carbon fiber without sacrificing glass transition temperature or other thermal properties related to the cross-link density. The MX 451 product is also free of ionic and organic contaminants.

Applications:

Kane Ace® MX 451 is suitable for use in the production of composites from prepregs, filament winding, infusion, resin transfer molding and VARTM processes where high temperature resistance is required. Other

applications include specialty adhesives and high performance coatings. Please see your Kaneka representative for more detailed information on applications.

Curing Agents:

Kane Ace® MX 451 is compatible with typical curing agents such as dicyandiamide, (dicy), diaminodiphenylsulfone (DDS) and acid anhydrides.

Storage Conditions:

Kane Ace® MX 451 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 TGPAP will undergo self homopolyaddition.

Handling Precautions:

Safe practices and procedures as outlined in the applicable MSDS must be followed. Product should be stored at less than 10°C

Characteristics (preliminary data):

Appearance:	Uniform, blue/yellow clear liquid.
CSR Content:	25 +/- 1 wt%
Epoxy Equivalent Weight:	130 +/- TBD g/eq.
Viscosity @ 50°C:	13,000 +/- TBD cps
Flash point :	>220 °C
Density:	1.1

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