



Provisional Technical Data Sheet

Mechster™ 5310TC

(Vinyl Ester Resin Top Coat)

Mechster™ designates a variety of unsaturated polyester resins synthesized at **Mechemco Industries**. These resins are specially engineered to meet the most diverse needs of fibreglass reinforced plastic moulding industry. Our R & D is geared to tailor **Mechster™ Resins** for the customers' most specific end application. In fact we take pride in suitably formulating the resin to improve your production efficiency as also the field performance of the FRP product.

Mechster™ 5310TC is a Bisphenol A Epoxy based vinyl ester resin top coat suitable for final coating on the Chemical Resistant FRP Lining or Equipment.

Mechster™ 5310TC is designed to have:

- Excellent film forming, anti-sag properties
- Excellent Chemical Resistant properties
- Excellent Curing to tack free surface
- Good Weather Resistant Properties

Surfaces coated with **Mechster™ 5310TC** display excellent barrier properties to a large range of aqueous solutions and improved resistance to organic solvents. The final coat of **Mechster™ 5310TC** would ensure the complete cure of the FRP laminate / lining, resulting in the optimum performance properties. **Mechster™ 5310TC** is equally suited for contact molding, Filament Winding, FRP Lining / Flake Glass Lining application as the final coat / Top Coat.

Physical Properties

Appearance: Yellowish Hazy Liquid

Specific Gravity @25°C	: 1.05± 0.01
Viscosity	: Thixotropic
Acid Value, mg KOH/g	: 7 ± 2
Volatile Content, (w/w)%	: 42 ± 2

Properties of Cured Mechster™ 5310TC

Tensile Strength, MPa	: 80
Tensile Modulus, Mpa	: 3500
Elongation at Break, %	: 5-6
Flexural Strength, MPa	: 150
Flexural Modulus, MPa	: 3500
Heat Deflection Temperature, °C	: 100
Barcol Hardness	: 35

(Test methods : IS 6746-1972, ASTM and BS where IS not available.)

Uses

Mechster™ 5310TC is suitable for application by brush or spray technique on the FRP laminate / FRP Lining / Flake Glass Lining as the final top coat. One can not further apply any FRP / lining on the surface coated with **Mechster™ 5310TC**. If it is required, you must consult the technical bulletin for the Top Coat Application.

Packing

Mechster™ 5310TC is supplied in non-returnable M.S. drums containing 200 kg net and HDPE carboys containing 30 kg net.

Storage and Handling

Mechster™ 5310TC should be stored in a cool and dry place away from sunlight, preferably below 25°C. Under these conditions, the shelf life is 3 months. The storage stability could be further improved by aerating the resin stored in barrels at an interval of about a fortnight. **Mechster™ 5310TC** has a flash point of 34°C and is classified as flammable. Containers should be kept in a cool and ventilated place away from sunlight and sources of ignition. "No Smoking" rules should be strictly enforced. In case of fire, use dry chemical, foam, carbon dioxide or water spray to extinguish the flame. Spillages may be absorbed onto sand or earth and shovelled off and disposed according to local disposal regulations.

Skin contact and vapor inhalation should be avoided during moulding because of the presence of styrene monomer. In case of irritation in the eye or skin, wash with copious amount of water. In extreme case, seek immediate medical advice. The moulding area should be sufficiently ventilated for reducing the vapour levels in the air while processing.

The above information and recommendation are based on our extensive experience in the field and is provided only as a general guidance for application of our product. The user should verify the suitability of our product for their own specific applications. We do not warrant or assume any liability for the information provided.