

PRODUCT DATA SHEET

# MECHSTER™ 1620(I)G

(Very Low Flammability Isophthalate Gel 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™ 1620(I)G** is a flame retardant gel coat for components to comply with the very low flammability requirement when used with Mechster™ 1620(I) or Mechster™ 1110MFR type laminating resin.

The **Mechster™ 1620(I)G** is designed to have,

- Excellent Surface Finish
- Faster Curing time
- Easy vertical surface application with minimal sagging
- Good toughness and weathering resistance

### Physical Properties

Appearance	: Creamy White viscous liquid
Specific Gravity @30°C	: 1.30 ± 0.02
Viscosity @ 30°C by	
Brookfield Viscometer, cps	: Thixotropic
Acid Value mg KOH/g	: 13 ± 2
Volatile Content (w/w) %	: 28 ± 2

### Curing Behaviour

Geltime, minutes @ 30°C with	
1.5% v/w A103 <sup>1</sup>	
1.5% v/w C108 <sup>2</sup>	: 10 - 12
Peak Exotherm Temperature°C	: 145

<sup>1</sup>A103 : Cobalt Octoate Solution containing 3% Cobalt.

<sup>2</sup>C109 : Methyl Ethyl Ketone Peroxide Containing 8% Active Oxygen

<sup>3</sup>Gel Coat Casting without any Reinforcement

### Typical Properties of Cured Mechster™ 1620(I)G

	Cast
Specific Gravity @ 25°C	1.40
Tensile Strength, MPa	45
Flexural Strength, MPa	65
Heat Deflection Temperature, °C	75
Barcol Hardness	40

The cast were prepared from **Mechster™ 1620(I)G** catalysed with 1.0% v/w accelerator (A103) and 1.5% v/w catalyst (C108). The specimens were first allowed to cure at room temperature and subsequently post cured at 60°C for six hours.

### Uses

**Mechster™ 1620(I)G** is ideally suitable for Flame Retardant Components and Parts to be produced by Hand Lay-up / Spray-up / RTM process for applications in Mass Transit, Automotive and Building and Construction Industries.

### Packaging and Storage

**Mechster™ 1620(I)G** is supplied in an open mouth HDPE Barrels containing 40 kg Net. It is recommended that material in the container is stirred / mix thoroughly prior to transfer / use. Material must be stored in a cool and dry place away from sunlight, preferably below 25°C. Under these conditions, the shelf life is 2 months.

### Handling Precautions

**Mechster™ 1620(I)G** has a flash point of 32°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. Spillage may be absorbed onto sand or earth and shoveled 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 compounding and moulding.

*Our information regarding our products, equipments and processes is based on extensive research and experience in the field of Applied Engineering and is provided as a general guidance in the application of our product. The user should verify the suitability of our product for their end use. We do not warrant or assume any liability for the information provided.*

Mechster™ is Registered Trade Mark of Mechemco