

## ICOM MC RESIN GR 1110 P

### CHARACTERISTICS

**ICOM MC Resin GR 1110 P** is a UV stabilized, high reactivity; high molecular weight Isophthalic acid based unsaturated polyester resin. It is a specialty resin for the pultrusion process.

**ICOM MC Resin GR 1110 P** is designed to have:

- Fast wet out of reinforcements
- Rapid cures
- Higher heat deflection temperature
- Excellent surface finish
- Higher filler loading
- Excellent UV stability

Pultruded components moulded from **ICOM MC Resin GR 1110 P** exhibit excellent hydrolytic stability, improved mechanical strength and electrical insulation properties.

### PHYSICAL PROPERTIES

PROPERTY	NOMINAL VALUES	TEST METHOD*
Appearance	Pale Yellow Viscous Liquid	AM-113
Specific Gravity @25 °C	1.10 ± 0.01	AM-103
Viscosity <sup>1</sup> @ 25 °C, cP	800 ± 100	AM-101
Acid Value, mg KOH/g	14 ± 3	AM-102
Volatile Content, (w/w)	40 ± 3	AM-106

### CURING BEHAVIOUR

PROPERTY	BPO – 50 (1.5% w/w)	TBPB (1% v/w)
Temperature, °C	80	140
Gel Time, min.	12-18	2-3
Cure Time, min.	14-20	3-4
Peak Exotherm Temperature, °C	>200	>235

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### TYPICAL PROPERTIES OF CURED UNFILLED CAST RESIN

PROPERTY	NOMINAL VALUES	TEST METHOD
Specific Gravity	1.20	AM-201*
Tensile Strength, MPa	73	ISO 527-2
Tensile Modulus, MPa	3650	ISO 527-2
Elongation at Break, %	3.0	ISO 527-2
Flexural Strength, MPa	120	ISO 178
Flexural Modulus, MPa	3200	ISO 178
Heat Deflection Temperature, C	110	ISO 75-2
Barcol Hardness	45	ASTM 2583

### USE

ICOM MC Resin GR 1110 P is suitable for manufacturing of high performance FRP components by pultrusion process.

### STORAGE

ICOM MC Resin GR 1110 P should be stored in a cool and dry place away from sunlight, preferably below 25 °C. Under these conditions, the shelf life is 6 months. The storage stability could be further improved by aerating the resin stored in barrels at an interval of about a fortnight.

### HANDLING AND PRECAUTIONS

ICOM MC Resin GR 1110 P 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 shovelled off and disposed according to local disposal regulations.

Skin contact and vapour 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.

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All information is given, based upon our best knowledge, but without liability to us. Data has been obtained by laboratory experiments made by our supplier. Since the condition under which the product is consumed is outside of our control, the product should be tested before use.