

## ICOM MC RESIN GR 9000S(CM)

### CHARACTERISTICS

ICOM MC Resin GR 9000S(CM) is a specially tailored room temperature curable unsaturated polyester resin for cultured marble casting applications.

ICOM MC Resin GR 9000S(CM) is designed to have:

- Easy dispersion of pigments and fillers
- Facilitate high loading of mineral fillers
- Excellent air release properties
- Uniform & complete curing

### USE

ICOM MC Resin GR 9000S(CM) is highly suitable for Polymer Concrete application where in it is mixed with filler materials and subjected to casting and curing at ambient temperatures.

### PROCESSING

Cultured Marble Products made from ICOM MC Resin GR 9000S(CM) with suitable gel coat, viz., are an ideal replacement for wood, natural marble and granite.

Products made out of ICOM MC Resin GR 9000S(CM) are:

- Dimensionally stable
- Water resistant
- Resistant to normal house-hold chemicals
- Machinable and easily repairable

PHYSICAL PROPERTIES As supplied	VALUE
Appearance	Clear pale yellow color
Specific Gravity at 25 °C	1.11 ± 0.01
Viscosity at 25 °C, Brookfield LVT, cP	550 ± 50
Acid Value mg KOH/g	< 33
Volatile Content (w/w) %	35 ± 2

CURING BEHAVIOUR	VALUE
Gel Time @ 25 °C, minutes 100 g Resin + 1% A101 <sup>1</sup> + 1% C109 <sup>2</sup>	15 - 25
Time to peak temp., minutes	150 - 170
Total Time to Cure, minutes	30 - 42
No. of Cracks in the Resin Cast	Nil
Gel Time @ 25 °C, minutes 50 g Resin + 1.0 g BP-50 <sup>3</sup> taken in a Test Tube immersed in constant temp. Oil Bath	8 - 12
Peak Temperature, °C	150 - 170
Total Time to Cure, minutes	12 - 15
No. of Cracks in the Resin Cast	Nil

## ICOM MC RESIN GR 9000S(CM)

<sup>1</sup> A101: Cobalt Octoate Solution (1% Cobalt Content)

<sup>2</sup> C109: Methyl Ethyl Ketone Peroxide (9% Active Oxygen)

<sup>3</sup> BP-50: Benzoyl Peroxide Paste (50% Concentration)

Typical Properties of Cured ICOM MC Resin GR 9000S(CM)	ASTM	VALUE
Specific Gravity at 25°C	D792	1.23
Volume Shrinkage, (%)	----	~ 6
Tensile Strength, MPa	D638M	65
Tensile Modulus, MPa	D638M	3700
Tensile Elongation at Break, %	D638M	2.0
Flexural Strength, MPa	D790M	100
Flexural Modulus, MPa	D790M	3800
Heat Deflection Temperature, °C *fully cured	D648	70
Barcol Hardness	D2583	48

### PACKAGING

ICOM MC Resin GR 9000S(CM) is supplied in non-returnable M.S. drums containing 220 kg or returnable IBC's containing 1.0 MT and ISO Tanks containing ~20 MT net.

### STORAGE AND HANDLING

ICOM MC Resin GR 9000S(CM) should be stored in a cool and dry place away from sunlight, preferably below 25 °C. Under these conditions, the shelf life is 4 months. The storage stability could be further improved by aerating the resin stored in barrels at an interval of about a fortnight.

ICOM MC Resin GR 9000S(CM) has a flash point of 34 °C and is classified as flammable. Containers could 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 shoveled off and disposed according to local disposal regulations.

Skin contact and vapor inhalation should be avoided during molding 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 molding area should be sufficiently ventilated for reducing the vapor levels in the air while compounding and molding.

06/2016

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.