



MIRteq Inc

T~ (260) 490 3706 | F~ (260) 489 9084 | E~ sales@mirteq.com

2201 Suppliers Court, Fort Wayne IN

REVOLUTIONARY
MOLDING SOLUTIONS
YOU CAN BUILD A
BUSINESS ON

MIRteq supplies a range of thermoset resins that produce high quality, precisely engineered closed molded products with a compelling value proposition, without requiring expensive molds or million-dollar injection equipment.

Speciality products include:

- general molding
- roto-casting
- low exotherm; and
- chemically resistant

resin systems and pastes, developed using either MIRteq’s award winning micro-fiber systems or latest generation resin-alloy technology.



MIR-300 TOOLING RESIN

The MIR Tooling Resin is a new and efficient material to build tools. Molds can be built directly, without first requiring a plug, or alternatively the material can be sprayed straight onto a plug.

Spraying directly onto an undercut substrate removes multiple stages in the mold building process. The material is machineable, may not require structural supports (depending on size and design) and delivers an excellent molding surface.

For added reinforcement ribs can also be molded into the substrate using the MIR-300 material.

‘No other tooling material would have withstood that pressure test’

– Glen N after he had left a MIR-300 tool outside in the Florida sun from March through November

The MIR-300 Resin Tooling System involves far less labor, and is far quicker tool building process, because the glass is already in the resin.

The material is sprayed on in successive layers (using modified MVP or Glas Craft spray systems), up to 160 mils per pass with no sag on vertical surfaces. To build up the mold surface layers are applied at 10 minute intervals (up to 500 mils at a time before letting it cure for 24 hours).

MIR-300 is durable, has good mechanical properties, does not chip and if damaged the surface can easily be repaired.

A MIR molding surface has minimal porosity and voids, and is easily polished. We recommend applying a flow coat to the machined surface to achieve an A-class finish.

You can get hundreds of pulls off a MIR mold.

Other Features:

| | | | |
|--------------------|-----------------------|---------------------|--------------------------------------|
| Thixotropic Index | 4.5 – 5.5 | Flexural strength | 60MPa (8,700psi) |
| % Microfibers | 10% | Flexural elongation | 2.3% |
| Density | 0.8 – 0.9 g/cc | Flexural modulus | 4.0 GPa (580,000psi) |
| Coverage | 2.14 sq ft/gal @ 3/4" | Tensile strength | 39 MPa (5,700psi) |
| Coating Thickness | 1/8 to 3/16 inch | Tensile modulus | 4.4 GPa (640,000psi) |
| Lbs/sq ft @ 1 mil | 0.0047 | HDT | >158°F (>70°C) |
| Styrene | 10 - 20% | Density | 890 kg/m ³ (55 lbs/cu.ft) |
| Typical shrinkage* | 0.3% | Shore D | 80 |

* Can be adjusted

MIR-300 – Faster To Market