



iNVENTA™ 74109 SMC Material

Description: This is the ultimate material solution for mass reduction, featuring a specific gravity under 1.11 (~60% lighter than standard SMC formulations). This new material is a result of an intense effort at MFG Research to develop the lightest SMC material available.

iNVENTA 74109 provides lightweight benefits comparable to carbon fiber, with the benefits of lower cost and easier processing. The properties are an excellent match for compression molded parts in applications where mass reduction is a goal.

Properties	Typical Values	Test Method
Tensile Strength	55 MPa	ISO 527
Tensile Modulus	6600 MPa	ISO 527
Poisson's Ratio	0.36	ISO 527.1/2
Flex Strength	110 MPa	ISO 178 Method A
Flex Secant Modulus at 0.5mm	6300 MPa	ISO 178 Method A
Unnotched Izod	54 kJ/m ²	ISO 180/U
Specific Gravity	1.11	ISO 1183 Method A
Reinforcement Content	36%	ISO 1172
Water Absorption	0.49 %	ISO 62 Method 1
Shrinkage	-0.06%	iCom 210-MIX-003

Applications: This proprietary thermoset SMC was specially formulated by MFG for automotive applications, but is also useful for other applications with demanding strength to weight ratio requirements.

MFG offers a number of formulations specifically designed for maximizing strength to weight ratio. Our engineering and R&D laboratory is available to assist with evaluation, testing and certification of material options that will result in the performance target you desire.

The values presented in this data sheet are typical values and are not to be interpreted as product specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, expressed or implied. Data was obtained on molded laboratory test plaques and does not necessarily represent the values that will be attained on molded parts.

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