


**Product Family :**
**IDIstrong - Sheet Molding Compound (SMC)**
**Product Description :**
**The material is a composite based on thermosetting resin, mineral filler and reinforced with fibers**

Material properties		HP-MC	CF-MC	GFUD-MC
<b>Aspect</b>	Color	Black	Black	Natural
<b>Physical</b>	Density <i>ISO 1183 (g/cm<sup>3</sup>)</i>	1.82 to 1.94	1.36. to 1.40	1.68 to 1.80
	Shrinkage <i>ISO 2577 (%)</i>	-0.04 to 0.08	-0.06	+0.10 to +0.22
	Reinforcement type	Glass fiber	Carbon fiber	Glass fiber
	Reinforcement amount <i>%</i>	55	50	38
<b>Mechanical</b>	Flexural strength <i>EN ISO 14125 (MPa)</i>	450	345	610
	Flexural modulus <i>EN ISO 14125 (MPa)</i>	17000	23670	18100
	Charpy impact resistance <i>EN ISO 179 (kJ/m<sup>2</sup>)</i>	180	65	-
	Tensile strength at break <i>EN ISO 527-4 (MPa)</i>	220	136	250
	Modulus of elasticity <i>EN ISO 527-4 (MPa)</i>	16000	28825	17300
	Heat distortion temperature <i>EN ISO 75-2 (°C)</i>	>200	>200	>200
<b>Electrical</b>	Surface resistivity <i>CEI 60093 (Ohm/square)</i>	>1.10E14	950	>1.10E14
<b>Fire resistance</b>	UL test (unofficial) <i>UL 94(Level &amp; mm)</i>	HB & 4	-	-
	Horizontal combustibility – Speed of combustion <i>FMVSS 302 - ISO 3795 (mm/min)</i>	-	-	<100
<b>Others</b>	Water absorption <i>ISO 62 method 1</i>	<0.5	<0.5	<0.5

**The information on this sheet is a guide.** The stated values reflect an average of several tests conducted on IDI CI Europe's goods. These values were obtained under ideal conditions and may not be replicated in any particular test, part, or application. Because the values achieved in actual parts depend considerably on part design, molding conditions, and testing methods, no guarantee is made or implied regarding values to be obtained in any specific test, part, or application. IDI CI Europe makes no warranty or representation as the suitability of any of its goods for use in any application. IDI CI Europe relies on customer to conduct its own tests and judge for itself the suitability of IDI CI Europe's goods.