



Product Family : IDIWatt - Sheet Molding Compound (SMC), Bulk Molding Compound (BMC), Continuous Impregnated Compound (CIC)

Product Description : The material is a composite based on thermosetting resin, mineral filler and reinforced with fibers

Material properties		SMC		BMC			CIC	
		46LS1200	46LS17000	24000	82LS2691S	82LS2691S	45LS1200	25000
Aspect	Color	RAL 7030	NATURAL	BLACK	BLACK	BLACK	NATURAL	RAL 7030
Physical	Density <i>ISO 1183 (g/cm³)</i>	1.77	1.76	1.7	1.75	1.67	1.8	1.73
	Shrinkage <i>ISO 2577 (%)</i>	0.08	0.02	0.2	0.06	0.08	0.2	0.12
	Reinforcement type	Glass fiber	Glass fiber	Glass fiber	Glass fiber	Carbon fiber	Glass fiber	Glass fiber
	Reinforcement amount <i>%</i>	30	30	20	10	5	28	25
Mechanical	Flexural strength <i>EN ISO 14125 (MPa)</i>	190	220	90	40	40	120	130
	Flexural modulus <i>EN ISO 14125 (MPa)</i>	11000	11000	9000	13000	13000	12000	10000
	Charpy impact resistance <i>EN ISO 179 (kJ/m²)</i>	70	100	22	6	2	40	50
	Heat distortion temperature <i>EN ISO 75-2 (°C)</i>	>200	>200	>200	>200	>200	>200	>200
Electrical	Surface resistivity <i>CEI 60093 (Ohm/square)</i>	>1.10E14	>1.10E14	>1.10E14			>1.10E14	>1.10E14
	Electrical conductivity (x,y) <i>4 points method IDI Internal test (S/cm)</i>				31	59		
Thermal	Thermal conductivity (x,y) <i>IDI internal test (W/mk)</i>				21	25		
	Thermal conductivity (z) <i>IDI internal test (W/mk)</i>				1.1	10		
Fire resistance	UL approval <i>UL 94 V0</i>	3 mm	3 mm	3 mm	2.5 mm	3 mm	3 mm	3.2 mm
Others	Water absorption <i>ISO 62 method 1</i>	<0.5	<0.5	<0.5	<0.5	<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.