

# Material properties of Allbro SMC & DMC



	Typical property	standard	units	SMC 1-20	SMC 2-20	BMC/DMC
Enclosures	Density	ISO 1183	g/ccm	1.8	1.8	1.8
	Fibre content	EN ISO 1172	mass-%	20	30	18
	Fibre type			Glass	Glass	Glass
	Recycling code	VDA 260		UP-GS20	UP-GS30	UP-GS20
	Recyclable	-	-	Yes	Yes	Yes
	Young´s modulus 1)	EN ISO 527-4	GPa	9	10.5	13
	Tensile strength 1)	EN ISO 527-4	MPa	55	70	31
	Tensile rupture strain 1)	EN ISO 527-4	%	1.4	1.4	0.4
	Compression strength 1)	EN ISO 14126	MPa	160	160	160
	Poisson´s ratio 1)	EN ISO 527-4	-	0.3	0.3	0.3
Hinges	Flex modulus 1)	EN ISO 14125	GPa	10.5	10.5	9.5
	Flexural strength 1)	EN ISO 14125	MPa	150	165	90
	Impact strength 1)	EN ISO 179	KJ/m <sup>2</sup>	60	70	30
	CTE 1)	ISO 11359-2	10-6m/mK	18	18	18
	Continuous service temperature	Similar to IEC 216	°C	150	150	150
Locks	Short term service temperature	-	°C	210	210	210
	Heat distortion temperature	EN ISO 75-2	°C	200	200	200
	Specific heat capacity	-	J/gK	1.1	1.1	1.1
	Volume resistivity	IEC 60093	Ohm*cm	1012	1012	107
	Surface resistivity	IEC 60093	Ohm	1014	1014	109
Handles	Comparative tracking index	IEC 60112	CTI	600	600	600
	Dielectric strength	IEC 60243-1	kV/mm	25	25	25
	Dielectric constant	IEC 60250	-	4.5	4.5	4.5
	Dissipation factor	IEC 60250	-	0.01	0.01	0.01
	Oxygen index	EN ISO 4589-2	%	22	22	22
Accessories	Flammability	UL 94	level/thickness	V0/3.2mm	V0/3.2mm	V0/3.2mm
	Flammability	ISO 3795	Class/thickness	NBR/3.2mm	NBR/3.2mm	NBR/3.2mm
	Fire / smoke	EN 45545	Hazard Level			
	Glow bar	IEC 60707	level	BH2-95	BH2-95	BH2-95
	Glow wire	IEC 60965-2-1	°C	960	960	960
Rotary Operating Handles	Water absorption	ISO 62	% after 24h	<0.3	<0.3	<0.3
	<b>Notes:</b>					
	All materials supplied for SMC/BMC are in accordance with: ROHS, SMC/BMC materials do not contain heavy metals, asbestos, halogens or other toxic materials. All values in this table are representative mean values taken from compression moulded flat panels. Properties may vary due to modifications of products, moulding conditions or environmental influence. Properties given are accurate to the best of our current know-how and experience.					
	All reinforcement glass fibres used are textile glass fibres of a diameter greater than 14 microns and cannot be inhaled or otherwise ingested.					
	Textile fibres are not hazardous fibres.					
Transformer Equipment	SMC and BMC are recyclable materials.					
Index						