Technical Data Sheet

Durostone® UPM S2 red

GFK-UP

Typical characteristics

- Special vinyl ester (VE) resin matrix reinforced with a combination of an e-glass roving mat and fabric
- SMC high-pressure laminate
- High mechanical strength
- High dielectric strength

Typical industries

- Generator and Motor

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g / cm^3	1,95
Flexural strength [1] ⊥	ISO 178	MPa	350
Flexural strength [1] ⊥ +130°C	ISO 178	MPa	175
Modulus of elasticity in flexion [1] ⊥	ISO 178	MPa	18000
Modulus of elasticity in flexion [1] ⊥ +130°C	ISO 178	MPa	12000
Compressive strength ⊥	ISO 604	MPa	480
Tensile strength II	ISO 527	MPa	220
Impact strength II (Charpy)	ISO 179	kJ / m^2	200
Thermal properties			
Flammability	UL 94	/	V0 / 5mm
Smoke density & toxicity, class	NF F 16-101	/	F0
Fire test, class	NF P 92-501	/	M2
Temperature index	IEC 60216	T.I.	155
Insulation class	IEC 60085	/	F
Physical properties			
Water absorption (4mm thickness)	ISO 62	%	< 0,5
Dielectrical properties			
Electric strength 90°C under oil ⊥	IEC 60243	kV / mm	12

	Test method	Unit	Guideline value
Electric strength 90°C under oil II	IEC 60243	kV/25mm	75
Relative permittivity (50 Hz)	IEC 60250	ε_r	4
Dielectric loss factor (50 Hz)	IEC 60250	tan δ	0,01
Specific surface resistance	IEC 60093	Ω	10^{10}
Comparative tracking index	IEC 60112	CTI	600