

Properties

SERG1

Glass fiber-reinforced flame retardant flame-retardant ABS resin (GF10%, UL94 V-0)

Properties	Test methods	Test conditions	Units	
Mold shrinkage	ASTM D955	-	%	0.2-0.5
Tensile strength	ISO 527	-	MPa	75
Flexural strength	ISO 178	-	MPa	110
Flexural modulus	ISO 178	-	MPa	4700
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m2	8
Notched Charpy impact strength	ISO 179/1eA	-30 deg C	kJ/m2	5
Notched Izod impact strength	ASTM D256	23 deg C/6.4mm	J/m	80
Notched Izod impact strength	ASTM D256	-30 deg C/6.4mm	J/m	40
Rockwell hardness	ISO 2039	-	-	R114
Deflection temperature under load	ISO 75	1.80MPa	deg C	86
Deflection temperature under load	ASTM D648	1.82MPa/12.7mm	deg C	94
Vicat softening temperature	ISO 306/B50	50N X 50deg C/h	deg C	91
Coefficient of linear thermal expansion	ISO 11359	MD	X1E-5/deg C	5
Coefficient of linear thermal expansion	ISO 11359	TD	X1E-5/deg C	8
Flammability	UL94	-	-	V-0/1.7mm 5VA/2.5mm
Dielectric strength	ASTM D149	1.5mm	MV/m	34
Arc resistance	ASTM D495	3.0mm	sec(PLC)	10(7)
Water absorption	ISO 62	-	%	0.3
Density	ISO 1183	-	g/cm3	1.30

Note

- Values are typical, not quality assured.
- UL recognition File No. of Daicel Polymer is E47773.

Typical settings for processing

Preliminary drying	Barrel temperature(deg C)				Screw rotation (rpm)	Back pressure (MPa)	Mold temperature (deg C)
	Nozzle	Front	Middle	Back			
3-4hrs 80-85deg C	200-220	200-220	180-200	160-180	40-60	10-20	60-80