

NOVALLOY S series

PC/ABS resin

Technical Information

TI-05186

Properties

S4220(V)

Glass fiber-reinforced flame-retardant PC/ABS resin (GF20%)

Properties	Test methods	Test conditions	Units	
Mold shrinkage	Our standard	-	%	0.2-0.5
Tensile strength	ISO 527	-	MPa	78
Flexural strength	ISO 178	-	MPa	124
Flexural modulus	ISO 178	-	MPa	5700
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m ²	7
Notched Izod impact strength	ASTM D256	23 deg C/3.2mm	J/m	70
Deflection temperature under load	ISO 75	1.80MPa	deg C	112
Deflection temperature under load	ASTM D648	1.82MPa/6.4mm	deg C	121
Coefficient of linear thermal expansion	ISO 11359	MD	X1E-5/deg C	4
Coefficient of linear thermal expansion	ISO 11359	TD	X1E-5/deg C	8
Flammability	UL94	-	-	V-0/1.5mm 5VA/2.0mm
Dielectric strength	ASTM D149	1.5mm	MV/m	26
Arc resistance	ASTM D495	3.0mm	sec(PLC)	69(6)
Hot wire ignition	UL746A	1.5mm	sec(PLC)	150(0)
High ampere arc ignition	UL746A	1.5mm	(PLC)	149(0)
High voltage tracking rate	UL746A	3.0mm	mm/min(PLC)	300(4)
Comparative tracking index	IEC 112	3.0mm	V(PLC)	100(4)
Water absorption	ISO 62	-	%	0.3
Density	ISO 1183	-	g/cm ³	1.33

Note

- Test methods such as ISO standards are fully or almost compliant with the standards.
- Values are typical, not quality assured.
- UL recognition File No. is E47773.
- The colorant formulations are restricted for each UL certified color. Please contact us for more information.

Typical settings for processing

Preliminary drying	Barrel temperature(deg C)				Screw rotation (rpm)	Back pressure (MPa)	Mold temperature (deg C)
	Nozzle	Front	Middle	Back			
4-5hrs 90-120deg C	230-260	230-260	220-250	200-240	50-100	5-20	60-80

Novacel Co., Ltd.

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