

# NOVALLOY S series

PC/ABS resin

Technical Information

TI-05185

## Properties

### S4210(V)

Glass fiber-reinforced flame-retardant PC/ABS resin (GF10%)

Properties	Test methods	Test conditions	Units	
Mold shrinkage	Our standard	-	%	0.2-0.5
Tensile strength	ISO 527	-	MPa	59
Flexural strength	ISO 178	-	MPa	103
Flexural modulus	ISO 178	-	MPa	4200
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m <sup>2</sup>	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	106
Deflection temperature under load	ASTM D648	1.82MPa/6.4mm	deg C	116
Coefficient of linear thermal expansion	ISO 11359	MD	X1E-5/deg C	6
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)	70(6)
Hot wire ignition	UL746A	1.5mm	sec(PLC)	150(0)
High ampere arc ignition	UL746A	1.5mm	(PLC)	150(0)
High voltage tracking rate	UL746A	3.0mm	mm/min(PLC)	267(4)
Comparative tracking index	IEC 112	3.0mm	V(PLC)	100(4)
Water absorption	ISO 62	-	%	0.3
Density	ISO 1183	-	g/cm <sup>3</sup>	1.27

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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