

# NOVALLOY B series

PBT/ABS resin

Technical Information

TI-05193

## Properties

### **B1700**

PBT/ABS resin

Standard

Properties	Test methods	Test conditions	Units	
Mold shrinkage	Our standard	-	%	1.2-1.4
Tensile strength	ISO 527	-	MPa	47
Flexural strength	ISO 178	-	MPa	74
Flexural modulus	ISO 178	-	MPa	2400
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m2	3
Notched Izod impact strength	ASTM D256	23 deg C/6.4mm	J/m	30
Deflection temperature under load	ISO 75	1.80MPa	deg C	75
Deflection temperature under load	ASTM D648	1.82MPa/6.4mm	deg C	85
Deflection temperature under load	ISO 75	0.45MPa	deg C	150
Deflection temperature under load	ASTM D648	0.46MPa/6.4mm	deg C	150
Coefficient of linear thermal expansion	ISO 11359	MD	X1E-5/deg C	10
Coefficient of linear thermal expansion	ISO 11359	TD	X1E-5/deg C	-
Flammability	UL94	-	-	HB
Dielectric strength	ASTM D149	1.5mm	MV/m	28
Arc resistance	ASTM D495	3.0mm	sec(PLC)	128(5)
Hot wire ignition	UL746A	1.5mm	sec(PLC)	10(4)
High ampere arc ignition	UL746A	1.5mm	(PLC)	150(0)
High voltage tracking rate	UL746A	3.0mm	mm/min(PLC)	19(1)
Comparative tracking index	IEC 112	3.0mm	V(PLC)	600(0)
Water absorption	ISO 62	-	%	0.15
Density	ISO 1183	-	g/cm3	1.23

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			
3-5hrs 80-120deg C	230-250	240-250	220-240	190-230	50-90	5-20	60-80

**Novacel Co., Ltd.**

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