

# NOVALLOY A series

PA/ABS resin

Technical Information

TI-05189

## Properties

### A1700

PA/ABS resin

Properties	Test methods	Test conditions	Units	Dry	2.7% moist.
Mold shrinkage	Our standard	-	%	0.8-1.1	
Tensile strength	ISO 527	-	MPa	50	33
Flexural strength	ISO 178	-	MPa	74	42
Flexural modulus	ISO 178	-	MPa	2200	960
Notched Charpy impact strength	ISO 179/1eA	23 deg C	kJ/m <sup>2</sup>	16	40
Notched Charpy impact strength	ISO 179/1eA	-30 deg C	kJ/m <sup>2</sup>	7	
Notched Izod impact strength	ASTM D256	23 deg C/6.4mm	J/m	160	440
Notched Izod impact strength	ASTM D256	-30 deg C/6.4mm	J/m	70	
Rockwell hardness	ISO 2039	-	-	R116	R109
Deflection temperature under load	ISO 75	1.80MPa	deg C	70	70
Deflection temperature under load	ASTM D648	1.82MPa/6.4mm	deg C	80	78
Deflection temperature under load	ISO 75	0.45MPa	deg C	105	95
Deflection temperature under load	ASTM D648	0.46MPa/6.4mm	deg C	105	99
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	
Water absorption	ISO 62	-	%	1	
Density	ISO 1183	-	g/cm <sup>3</sup>	1.09	

#### 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 90-100deg C	220-250	230-260	220-250	180-210	60-90	10-20	60-70