



## Material Datasheet 6

<b>Trade Name : Zincoloy PA3377R</b>	
<b>Material : Polyamide (Nylon) 30% Fiber</b>	
<b>Color No. : All Colors</b>	
<b>REACH N2580 Compliance</b>	

Properties	Test Method	Test Condition	Unit	Typical Value
<b>Physical</b>				
Specific Gravity	ASTM D792		g/cm <sup>3</sup>	1.35 - 1.40
Mold Shrinkage, normal	ISO 294	60 x 60 x 2mm	%	0.4 - 0.6
Water Absorption	ASTM D570	23°C	%	0.15 - 0.25
<b>Rheological</b>				
Melt Flow Index	ASTM D1238	200°C - 5kg	g/10min	30 - 35
<b>Mechanical</b>				
Tensile Strength	ASTM D638	23°C	kg/cm <sup>2</sup>	160 - 180
Elongation at Yield	ASTM D638	23°C	%	2.6 - 2.8
Flexural Modulus	ASTM D790B		MPa	8800 - 9000
Izod Impact	ASTM D256	V-notched, 1/8"	kg.cm/cm	9 - 10
<b>Electrical</b>				
Volume Resistivity	ASTM D257	1.5mm - normal		1E13 (10 <sup>13</sup> Ohm.cm)
	ASTM D257	1.5mm - conditional		1E11 (10 <sup>11</sup> Ohm.cm)
<b>Thermal</b>				
Heat Distortion Temp.	ASTM D648	Unannealed	°C	min 200

### Recommended Injection Molding Parameters

Barrel Temperature	Value	Mold Temperature	Value
Zone 1	220 - 280°C	Fixed Half	80 - 120°C
Zone 2	220 - 280°C	Moving Half	60 - 80°C
Zone 3	220 - 280°C	Injection Pressure	200 - 400 Bars
Zone 4	210 - 280°C	Hold on Pressure	20 - 100 Bars
Nozzle	160 - 230°C	Screw Back Pressure	10 - 80 Bars
		Screw Speed	50 - 200 RPM
		Drying Hour	2 - 6
		Drying Temperature	80°C

The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. For further information, please contact or fax to Zinco Colours Technical Services Department.



## Nylon Fibre Source

Our Nylon Fibre sources are mainly from industrial waste in Japan, which are cleaner, more reliable and consistent.

Some rejected product samples were collected directly from the factory.

**Automotive Parts**



**Brush**



**Office Chair**



**Cable Tie**





## Finished Product

### BOSCH - Power Tool Handle

