



## Material: Acetal C

Having a good combination of properties makes Acetal C suitable for many applications. Physiologically inert, high impact strength, excellent machinability, good dimensional stability, low moisture absorption and good chemical resistance make it an ideal choice for precision machined components.

### Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Natural(White)/Black
Density	ISO 1183	g/cm <sup>3</sup>	1.41
Water Absorption - saturation in air (23°C/50%RH)	-	%	0.2
Water Absorption - saturation in water (23°C)	-	%	0.85
Tensile strength*1	ISO 527	N/mm <sup>2</sup>	68
Tensile modulus of elasticity*1	ISO 527	N/mm <sup>2</sup>	3100
Elongation at break*1	ISO 527	%	35
Impact - Charpy*1	179/1eU	kJ/m <sup>2</sup>	>150
Impact – Izod notched	180/2A	kJ/m <sup>2</sup>	7
Hardness	Rockwell Shore D	-	M84
Melt point	-	°c	165
Max service temp in air short periods	-	°c	140
Max service temp continuously for 20000hrs	-	°c	100
Linear thermal expansion coefficient	-	K <sup>-1</sup> x10 <sup>-5</sup>	11.0
Thermal Conductivity	-	W/(K.m)	0.31
Flammability (6mm thickness)	-	-	HB
Volume resistivity*1	IEC93	Ohm.cm	>10 <sup>14</sup>
Dielectric strength*1	IEC243	Kv/mm	20
Outside applications – UV resistance	-	-	C/B
Acids – strong (Ph<3)	-	-	C
Alkalis – strong (pH>11)	-	-	A
Chlorinated Hydrocarbons	-	-	A/B
Hot Water	-	-	A
‘A’ – Acceptable service, ‘B’ – Limited, ‘C’ – Unacceptable			
*1 Measured on dry test specimens (where applicable)			

#### Availability:

Rod, 1m & 3m long – 3-250mm diameter

Plate, 1m & 3m long x 610mm & 1M wide x (610mm) 8-100mm & (1m) 8-50mm thickness

Tube, 1m & 3m long x 20–350mm od x 10–300mm id.

Sheet, 1m & 2m long x 1m - 1-6mm thickness

Coiled Strip 50kg Weight, 0.5–1mm thick x 1m wide

#### Applications:

Gear wheels, Cams, Heavily loaded bearings and rollers, Insulating components, Pump housings, Domestic appliance parts, Impellers, Valves, Valve seats, Electrical component

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The data shown are typical values and are not intended to represent specifications. Their aim is to guide the user toward a material choice.

Not all material sizes shown within the availability programme of this data sheet are available as standard.

Please contact ABG Rubber and Plastics Ltd for further details.