

# EC-10-A2

- **Out line:** EC-10-A2 is a glass fiber filled PPS compound developed to provide for a encapsulation of electronic micro devices.
- **Color:** Black

## Engineering Properties of EC-10-A2

Properties	Test Method	Unit	EC-10-A2
General Information			Low Pressure Molding
<ASTM>			
<b>Physical</b>			
Specific gravity	D-792	-	1.90
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.35/0.45
<b>Mechanical</b>			
Tensile strength	D-638	MPa	55
Tensile modulus	D-638	MPa	17000
Tensile elongation at break	D-638	%	0.4
Poisson's ratio	-	-	0.35
Flexural strength	D-790	MPa	85
Flexural modulus	D-790	MPa	14000
Flexural elongation at break	D-790	%	0.7
Izod impact strength	D-256	J/m	
notched / un notched			50/100
Compressive strength	D-695	MPa	100
Rockwell hardness, R/M	D-785	-	122/100
Coefficient of friction <sup>b</sup> , static /dynamic	-	-	0.33/0.33
<b>Thermal</b>			
Distortion temp. of under load, 1.82MPa	D-648	°C	255
Coefficient of thermal expansion <sup>c</sup> , -30 to 90°C	D-696	m/mK	1.8x10 <sup>-5</sup>
UL Flammability <sup>d</sup> , t~0.8mm	UL-94	-	V-0
<b>Electrical</b>			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	5
Dissipation factor, 1MHz	D-150	-	0.006
Comparative tracking index (CTI)	D-3638	Volt	-
Arc resistance	D-495	sec.	-
Volume resistibility	D-257	Ohm.cm	10 <sup>16</sup>
<b>Process Conditions</b>			
Cylinder temperature	-	°C	290-320
Mold temperature	-	°C	120-150

a: MD; Mold direction, TD; Transverse direction, b: P=150KPa, V=0.3m/s, PPS vs. carbon steel, c: Average value of MD & TD, d: UL file No. E53829



★Please refer to Material Safety Data Sheet for safety precautions prior to use. The information contained in this data sheet is based on tests or research DIC Corporation ("DIC") believes to be reliable, but no warranty is given by DIC concerning the accuracy or completeness thereof. The supply of the information does not release the recipient from the obligation to test the products as to their suitability for the intended applications and processes. DIC has no liability for any consequence of the application, processing or use of the information or the products. Information concerning the application of the products is not and should not be construed as a warranty as to non-infringement of intellectual property for a particular application.