



## Polyoxy methylene (POM) esd Acetal

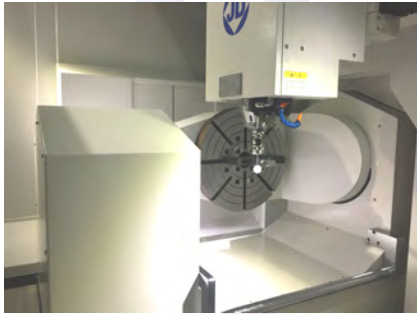


**Gonow esd Acetal** is an electrostatically dissipative (esd) stock shape thermoplastic that provides excellent strength, toughness, and wear properties. This material is made electrically active by the addition of an inherently dissipative polymer (IDP) to material's acetal base resin. Unlike the conductive powder and fiber fillers used in many electrically active plastics, Gonow esd's IDP additive is homogeneously dispersed throughout the material's polymer matrix. This uniformity virtually eliminates the wide variations in resistivity ("hot and cold spotting") that are often present in competitive products.

**Gonow esd** machines easily with common metal working machinery and is available in extruded heavy section rod, plate, and tubular bar.

### TYPICAL INDUSTRIES

- Semiconductor Manufacturing
- Electrical and Electronics
- Hard Drive Manufacturing
- Radio Frequency Communications
- Telecommunications



### Gonow esd ATTRIBUTES

- 180°F Continuous Use Temp.
- High Strength and Stiffness
- Excellent Toughness
- Superior Wear Resistance
- Low Coefficient of Friction
- Broad Chemical Resistance
- Low Moisture Absorption
- Easily Machined and Fabricated

### APPLICATIONS

- Circuit board test fixtures
- Semiconductor wafer handling devices
- Hard drive assembly fixtures
- Opto-electronic component housings
- ESD sensitive conveyor components (rollers, bearings, slide rails, pallets, product guides, etc.)



## GONOW esd Acetal

Property	Test Method	Units	Gonow esd
			<b>Electro-static Dissipative Acetal</b>
<b>Mechanical</b> Tensile Strength Tensile Elongation Tensile Modulus of Elasticity Flexural Strength Flexural Modulus of Elasticity Compressive Strength Izod Impact(notched) Rockwell Hardness	ASTM-D638 ASTM-D638 ASTM-D638 ASTM-D790 ASTM-D790 ASTM-D695 ASTM-D256 ASTM-D785	psi(MPa) % psi(MPa) psi(MPa) psi(MPa) psi(MPa) ft.-lbs./in.(J/m) M/R scale	6,400(44) 15 220,000(1517) 8,200(57) 215,000(1482) 9,000(62) 1.5(80) M51/R110
<b>Thermal</b> Coefficient of Linear Thermal Exp. Continuous Use Temperature Heat Deflection Temp. @ 264 psi Melting Point	ASTM D696 UL 746 ASTM D648 ASTM D3418	in./in./°F(m/m/°C) °F(°C) °F(°C) °F(°C)	6.5 x 10 <sup>-5</sup> (11.7x10 <sup>-5</sup> ) 180(82) 215(102) 324(162)
<b>Electrical</b> Surface Resistivity Volume Resistivity Static Decay	EOS.ESD 11.11 ESD-STM 11.12 FTMS-101C, 4046	Ohms/sq. Ohm-cm seconds	10 <sup>9</sup> -10 <sup>11</sup> 10 <sup>9</sup> -10 <sup>11</sup> <2.0
<b>Miscellaneous</b> Specific Gravity Coefficient of Friction - Dynamic Coefficient of Friction - Static Water Absorption/24 hours Flammability Color	ASTM D792 2.0 ksi-fpm 40 psi ASTM D570 UL 94	---  % weight	1.33 0.19 0.21 2.0 HB Beige

**Jiangsu Gonow Precision Technology Co., Ltd.** is dedicated to supplying our customers with the highest quality thermoplastic stock shapes for machining. We manufacture and stock a full line of thermoplastic materials in a wide variety of rod, plate and tubular bar sizes. In addition, we offer over 20 years of experience in the custom extrusion of application-specific and proprietary resins to meet even the most demanding performance requirements. Gonow Plastics offers full technical support for all products and is certified to ISO 9002 standards for the manufacture of extruded plastics stock shapes.



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