

# Sustarin C (Acetal)

## General purpose, acetal copolymer (Rochling Engineering)

SUSTARIN® C (Acetal) is a general-purpose copolymer acetal that is porosity free. The technology used in our manufacturing process ensures that every sheet and rod is free of centerline or core porosity. SUSTARIN® C is easily machined with excellent dimensional stability for close tolerance parts. A low coefficient of friction and excellent wear properties, especially in wet or moist environments, make it easy to see why SUSTARIN® C is one of the most widely used engineering thermoplastics available today.

#### **Product Features:**

- Excellent dimensional stability
- Porosity free
- Very low moisture absorption
- Continuous use temperature of 180°F
- Consistent properties in wet or moist environments
- Excellent electrical properties
- ⇒ Easy to machine to close tolerances ⇒ Natural and Black are FDA & USDA compliant

#### Typical Properties of Stock Shapes

Property	Units	Test Method	Value Natural & Black
Specific Gravity	-	ASTM D 792	1.41
Water Absorption 24 hrs	%	ASTM D 570	0.2
Water Absorption Saturation	%	ASTM D 570	0.9
Flammability	-	UL 94	НВ
Tensile Strength	psi	ASTM D 638	9,500
Elongation	%	ASTM D 638	40
Modulus	psi	ASTM D 638	400,000
Flexural Strength	psi	ASTM D 790	12,000
Modulus	psi	ASTM D 790	400,000
Notched Izod	ft-lb/in	ASTM D 256	1.2
Rockwell Hardness	-	ASTM D 785	M88
HDT @ 264 psi	°F	ASTM D 648	225
Coefficient Linear thermal expansion	in/in/°F	ASTM D 696	5.50 x10 <sup>-5</sup>
Dielectric Strength	V / mil	ASTM D 149	450
Volume Resistivity	ohm-cm	ASTM D 257	10 <sup>16</sup>
Dielectric Constant		ASTM D 150	3.8

### **Typical Applications**

- Bushings and bearings
- Rollers and gears
- Valves and manifolds
- Scraper blades
- Wear strips and pads
- Jigs and fixtures
- Electrical components

#### Certifications

- ASTM POM 0211, D6778
- ⇒ FDA21 CFR 177.2470
- USDA compliant
- ⇒ ASTM POM 211, D 6100

