

RÖCHLING datasheet

Sustarin | 2009

SUSTARIN® H AF (Delrin® AF)

SUSTARIN H AF Blend (Delrin AF Blend) is a special formulation of Delrin blended with 13% Teflon fibers added for enhanced wear characteristics and a lower coefficient of friction. Sustarin H AF Blend retains approximately 90% of the strength and rigidity of Delrin but with improved bearing and sliding properties. SUSTARIN H 100 AF (Delrin 100 AF) contains 20% Teflon fibers and provides even lower frictional properties. SUSTARIN H AF-DE588 is fully tested and certified to meet U.S. Navy specifications for use in seals, gaskets and valve seats. SUSTARIN TF 13 is offered as a lower cost alternative to Delrin AF Blend and achieves similar physical properties.

Product Features:

- Continuous use temperature of 185° F
- Low coefficient of friction
- Improved wear properties versus Delrin
- Excellent strength and toughness
- Natural color is dark brown
- Excellent sliding properties
- Excellent insulator
- Very easy to machine

Typical Properties of Stock Shapes

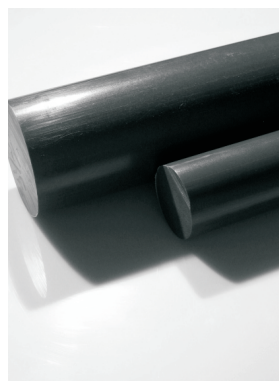
Property	Units	Test Method	H AF Blend	H AF DE588
Specific Gravity	-	ASTM D 792	1.5	1.54
Water Absorption 24 hrs	%	ASTM D 570	0.2	0.2
Water Absorption Saturation	%	ASTM D 570	0.8	0.8
Flammability	-	UL 94	HB	HB
Tensile Strength	psi	ASTM D 638	8,000	6,630
Elongation	%	ASTM D 638	20	30
Modulus	psi	ASTM D 638	410,000	540,000
Flexural Strength	psi	ASTM D 790	12,500	12,500
Modulus	psi	ASTM D 790	450,000	405,000
Notched Izod	ft-lb/in	ASTM D 256	0.7	-
Rockwell Hardness	-	ASTM D 785	R115	R110
HDT @ 264 psi	°F	ASTM D 648	248	244
Coefficient Linear thermal expansion	in/in/oF	ASTM D 696	5.1 x 10 ⁻⁵	4.4 x 10 ⁻⁵
Dielectric Strength	V / mil	ASTM D 149	450	400
Volume Resistivity	ohm-cm	ASTM D 257	10 ¹⁶	10 ¹⁶
Dielectric Constant	-	ASTM D 150	3.7	3.1

Typical Applications

- Bearing components
- Bushings
- Housings
- Insulators
- Valve seats
- Seals and gaskets
- Gears
- Low friction parts

Certifications

- ASTM D 4181, 6778 and 6100 (shapes)
- DE588 meets NAVSEA 5959311 Rev. C, NAVSEA 803-4384678 Rev. B & C



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