

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

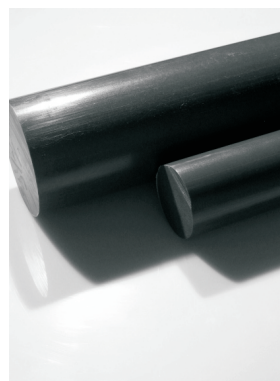
Property	Units	Test Method	H AF Blend	HAF DE588
Specific Gravity	-	ASTM D 792	1.5	1.54
Water Absorption 24 hrs	%	ASTM D 570	0.2	0.2
Water Absorption Saturation	%	ASTM D 570	0.8	0.8
Flammability	-	UL 94	HB	HB
Tensile Strength	psi	ASTM D 638	8,000	6,630
Elongation	%	ASTM D 638	20	30
Modulus	psi	ASTM D 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 ⁻⁶	4.4 x 10 ⁻⁶
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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Property data is based on typical values of resin as presented in an injection molded plaque. All information contained herein is presented in good faith based upon testing and practical experience. These values are not intended for use in establishing specification values. Röchling Engineering Plastics does not guarantee the accuracy and completeness of this information and it is the customer's sole responsibility to determine the suitability of the products in any given application.