

QUADRANT EPP PRODUCT DATA SHEET

ERTACETAL® H-TF

June 2001

Acetal Homopolymer + 15% PTFE (POM-H + PTFE)

ERTACETAL® H-TF is an enhanced grade of ERTACETAL® H for bearing applications. The material has superior wear resistance and a lower coefficient of friction than ERTACETAL® H, but is slightly softer with lower mechanical properties.

- Excellent wear resistance
- Good impact resistance
- Good sliding properties
- Good chemical resistance (5 < pH < 11)
- Excellent machinability
- Excellent dimensional stability
- Low coefficient of friction
- Ideal for close tolerance components

Common applications: Many bearing, wear and other applications where high PV (pressure & velocity) values are likely to be experienced.

Delivery Programme

Rod 1m & 3m long			
Diameter (mm):	10 (Min)	100 (Max)	
Plate 1m & 3m long			
Width (mm):	610		
Thickness (mm):	12 (Min)	50 (Max)	

Technical Specification

Property	ISO Methods	Units	ERTACETAL® H-TF
Colour	-	-	Deep Brown
Density	1183	g/cm ³	1.50
Water absorption			
Saturation in air (23°C / 50% RH)	-	%	0.17
Saturation in water (23°C)	-	%	0.72
Tensile strength* ¹	527	N/mm ²	55
Tensile modulus of elasticity* ¹	527	N/mm ²	3200
Elongation at break* ¹	527	%	10
Impact - Charpy* ¹	179/1eU	kJ/m ²	>30
Impact - Izod notched* ¹	180/2A	kJ/m ²	3
Hardness	Rockwell	-	M84
	Shore D	-	-
Melt point	-	°C	175
Max allowable service temp in air			
for short periods	-	°C	150
continuously for 20,000hrs	-	°C	90
Linear thermal expansion coefficient	-	K ⁻¹ x 10 ⁻⁵	10.5
Thermal conductivity	-	W/(K.m)	0.31
Flammability* ² (6mm thickness)	-	-	HB
Volume resistivity* ¹	IEC93	Ohm.cm	>10 ¹⁴
Dielectric strength* ¹	IEC243	kV/mm	20
Outside applications - UV resistance	-	-	B
Acids - strong (pH < 3)	-	-	C
Alkalis - strong (pH > 11)	-	-	C
Chlorinated hydrocarbons	-	-	A/B
Hot water	-	-	B

Distributor

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'A' - Acceptable service; 'B' - Limited service; 'C' - Unacceptable.

*¹ Measured on dry test specimens (where applicable)

*² Tests completed by Quadrant EPP, using UL test methods

Not all material sizes shown within the delivery programme section of this data sheet are available as standard. Please contact Quadrant EPP UK Ltd for further details.

The data shown are typical values and are not intended to represent specifications. Their aim is to guide the user toward a material choice.