

DATA SHEET

DELTRIN

Unfilled Homopolymer Acetal (Polyoxymethylene)

PROPERTY	UNITS	VALUE
MECHANICAL		
Specific Gravity	-	1.41
Tensile Strength	psi	11,000
Tensile Modulus	psi	450,000
Elongation (at break)	%	30
Flexural Strength	psi	13,000
Flexural Modulus	psi	450,000
Compressive Strength	psi	16,000
Hardness, Rockwell	-	R122
Coefficient of Friction (Dry vs. Steel)	-	.25
Limiting PV (with 4:1 safety factor)	psi x fpm	2,700
THERMAL		
Coefficient of Linear Thermal Expansion	in/in/F	4.70×10^{-5}
Heat Deflection Temperature (264 psi)	F	250
Glass Transition Temperature	F	160
Continuous Service Temperature	F	180
Thermal Conductivity	BTU/in/hr.ft.F	2.5
ELECTRICAL		
Dielectric Strength	volts/mil	450
Volume Resistivity	ohm-cm	10^{15}
OTHER		
Water Absorption, Immersion, 24 hrs.	% by wt.	.2
Water Absorption, Immersion, Saturation	% by wt.	.9

ENGINEERING NOTES:

- * FDA, USDA, 3-A DAIRY compliant
- * Wear resistance is much better when wet
- * Excellent machinability
- * Limited abrasion resistance
- * Limited chemical resistance

