

DATA SHEET

UHMW

PHYSICAL

SPECIFIC GRAVITY	.94
WATER ABSORPTION, 24 hr. (%)	< 0.01

MECHANICAL

TENSILE

Strength, Yield (10 ³ psi) @ 73°F.	3.1 - 4.0
Elongation, Ultimate (%) @ 73°F.	420 - 525
Modulus, Yield (10 ³ psi) @ 73°F.	80 - 100

FLEXURAL

Strength, (10 ³ psi) @ 73°F.	
Modulus, Yield (10 ³ psi) @ 73°F.	130 - 140

COMPRESSIVE STRENGTH

2% Offset, (10³ psi)

IMPACT STRENGTH

Izod, Notched (ft. - lb./in.) @ 73°F. no break

HARDNESS

R64

COEFFICIENT OF STATIC FRICTION

Against self

Against steel

THERMAL

CONDUCTIVITY

(BTU/hr/sq. ft./Degree F./in.)

COEFF. OF THERMAL EXPANSION

(10⁻⁵/Degree F.) 7.2

SPECIFIC HEAT

(BTU/lb./Degree F.)

HEAT DEFLECTION TEMP.

(Degree F.)

At 66 psi. 158 - 174

At 264 psi. 118

MAX. CONTINUOUS TEMP. (F.°) 160 - 180

ELECTRICAL

VOLUME RESISTIVITY

(Ohm/cm) 10¹⁸

DIELECTRIC STRENGTH

(V/Mil) 450 - 500

DIELECTRIC CONSTANT

At 60 HZ 2.3

At 1 MHZ

DISSIPATION FACTOR

At 60 HZ < .0005

At 1 MHZ

ARC RESISTANCE (seconds)



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