

AMERICAN HIGH PERFORMANCE SEALS, INC.

MATERIAL DATA SHEET *Duraloy 5123 Engineering Plastic*

GENERAL

Duraloy 5123 is a unique thermoplastic material for use in moving parts in which low friction and long wear life are important. It is a combination of PTFE fibers are present uniformly dispersed in acetal resin. This combination offers better wear characteristics than unfilled Acetal. Duraloy 5123 retains 90% of the strength that is inherent in unmodified Delrin acetal. Some properties are changed due to the addition of the softer PTFE fiber. The color of Duraloy 5123 Blend is dark brown.

MECHANICAL PROPERTIES

Tensile strength	D638	psi	6,200
Tensile Modulus	D638	psi	360,000
Elongation	D636	%	10
Flexural Strength	D790	psi	12,000
Flexural Modulus	D790	psi	445,000
Shear Strength	D732	psi	7,600
Compressive Strength	D695 10%	psi	14,000
Compressive Modulus	D695	psi	300,000
Friction Coefficient	Dry v Steel	Dynamic	0.15
Limiting PV	PTM55010	psi-fpm	9,000
Hardness	D785	Rockwell M	80
Izod Impact (notched)	D256 Type A	ft-lb/in	0.6
Specific Gravity	D-792		1.54
k (wear) factor	PTM55010	10-10in ³ -min/lb-ft-hr	40.00
Continous Service in Air	Without Load	F	180
Coefficient of Thermal Expansion	E831 (TMA)		60 x 10 ⁻⁵

The mentioned data are test values and are nominal approximations and depend on specimen size and orientation