CMS52

(modified PTFE)

CMS52 is a polymer filled PTFE (polytetrafluorethylene) material. It exhibits good sealability, very low coefficient of friction and low wear rate under dry running conditions. Its non-abrasive nature makes it an ideal sealing material for use against soft metal surfaces in dynamic applications. It has been met with great success in high speed, high temperature compressor applications.

Physical Properties	*ASTM Method*	*Typical Values*
Specific Gravity	D792	1.83 gr/cm 3
Water Absorption (24 hrs. @73.4° F)	D570	%
Color	Yellow / Tan	
Mechanical Properties		
Tensile Strength	D1708	2900 psi
Tensile Elongation	D1708	190%
Flexural Strength	D790	2100 psi
Flexural Modulus	D790	140,000 psi
Compressive Strength	D695	1000 psi
Compressive Modulus	D695	psi
Impact Strength (Izod, notched)	D256	ft-lb/in
Hardness	Shore D	65
Tribological Properties		
Coefficient of Friction		
Static	D3702	.14
Dynamic	D3702	.09
Wear Rate (PV: 20,000 psi-fpm)	D3702	µin/min
Thermal Properties		
Coefficient of Linear Thermal Expansion (78-400° F)	D696	10 -6/° F
Heat Deflection Temperature (@264 psi)	D648	° F
Glass Transition Temperature (Tg)	D3418	266
Continuous Service Temperature (Max @ no load)		500° F
Melting Point		648° F
Minimum Wear Temp		350° F
Electrical Properties		
Volume Resistivity	D257	10 16 ohm-cm
Dielectric Strength	D149	KV/mm
Delectric Constant	D150	50Hz, 200° C

Note: Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, based upon laboratory and real-world tests believed to be reliable and practical. However, Compressor & Machine Supply cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine product suitability to any given application.

8700 Scranton St Houston, Texas 77075
P. 713.847.9260 F. 713.847.9830
www.compmachsupply.com