TIVAR PRODUCT SPECIFICATIONS

Property*	Units	Test Method**	TIVAR 1000	TIVAR Marble/Uniblend	TIVAR 1000 AntiStatic	TIVAR DrySlide	Ceram P	TIVAR Oil Filled
DENSITY	GM/CC	ASTM D-792	0.93	.935 - .945	0.93	0.93	0.964	0.928
TENSILE PROPERTIES		ASTM D-638						
Yield Strength	PSI		3050	2800 - 3553	3000	2770	2800	2600
Tensile at Break	PSI		5800	3600 - 5200	4000	4815	3800	6527
Elongation at Break	PERCENT		200	50 - 350	140	200	300	280
TENSILE MODULUS	PSI	ASTM D-638	120,000	90,100 - 127,500	156,900	118,643	130,970	76,000
FLEXURAL MODULUS (1% Scant)	PSI	ASTM D-790B	110,000	86,000 - 101,000	100,000	106,459	99,933	63,818
IMPACT STRENGTH								
Izod Impact		ASTM D-256A	NO BREAK	NO BREAK	NO BREAK	NO BREAK	NO BREAK	NO BREAK
Tensile Impact	FT-LBS/IN²	ASTM D-1822	715	255 - 540	400	653	750	1366
WEAR PROPERTIES								
Sand on Wheel	MG WEIGHT LOSS	ASTM G-64	100	100 - 250	100	100	85	100
Abrasion Index	1018 STEEL=100	SAND SLURRY	10	10 - 22	10	10	8	12
COF THERMAL EXPANSION		ASTM D-696						
-30° To +60°C	IN/IN/°C		2×10^{-4}	1.8×10^{-4}	2×10^{-4}	2×10^{-4}	1.6×10^{-4}	2×10^{-4}
-54° To +140°F	IN/IN/°F		1.1×10^{-4}	1×10^{-4}	1.1×10^{-4}	1.1×10^{-4}	$.9 \times 10^{-4}$	1.1×10^{-4}
COF FRICTION (Polished Steel)		ASTM D-1894						
Static			.15 - .20	.15 - .20	.15 - .20	0.15	0.18	.20 - .25
Kinetic			.10 - .14	.10 - .14	.10 - .14	0.08	0.12	.10 - .15
HARDNESS	SHORE D	ASTM D-2240	68	64 - 70	68	68	70	68
ELECTRICAL PROPERTIES								
Static Decay Time	SECONDS	FTS-101C			< 0.1 SEC			
Dielectric Constant		ASTM D-150	2.30 - 2.35					
Dissipation Factor		ASTM D-150	$< .5 \times 10^{-3}$					
Surface Resistivity	OHMS	ASTM D-257	10^{17}	10^{17}	$10^{5} - 10^{9}$	$10^{5} - 10^{9}$	10^{17}	10^{17}
Volume Resistivity	OHMS-CM	ASTM D-257	10^{17}	10^{17}	$10^{5} - 10^{9}$	$10^{5} - 10^{9}$	10^{17}	10^{17}
FDA STANDARDS			YES	NO	NO	NO	NO	YES
TEMPERATURE RANGE MAXIMUM***		ASTM D-648						
CONSTANT	°F		180	180	180	180	220	180
INTERMITTENT	°F		200	200	200	200	240	200
MIMIMUM			N/A	N/A	N/A	N/A	N/A	N/A

* Values are averages and not specifications.
** ASTM test methods are under current procedures.
*** Maximum operating temperatures may reach 250°F (121°C) under no load conditions for steam cleaning purposes.