



Teflon Technical Data

Here are some general characteristics of resins used in TEFLON® Industrial Coatings as well as some general characteristics of Teflon-S® coatings. Formulated coatings may deviate considerable from the resin.

	UNITS	RESIN	CERAMIC	TYPE	FINISHES			ASTM
PROPERTY		PTFE	PTFE	FEP	PFA	EFTE	TEFLON S	
Non-Stick	---	E	E	E	VG	G	G	None
Chemical Resistance	---	G	E	E	E	VG	G	None
Abrasion Resistance	---	F	E	G	VG	E	E	None
Salt Spray Resistance	---	F	F	E	E	E	E	None
Water Absorption	Percent	<0.01	<0.01	<0.01	>0.03	<0.007	---	D570
Coef. of Fric. (Kinetic) (Static)	---	0.08 0.1	0.08 0.1	0.08 0.2	0.1 0.2	0.24 0.4	0.1-1.4 0.15-0.35	D1894
Specific Gravity	None	2.2	---	2.15	2.15	1.70	---	
Melt Point	Deg F	627	627	500	575	520	---	
Hardness	Shore D	60	65	55	60	75	60-90	D2240
Max. Continuous Use Temp.	Deg C Deg F	290 550	290 550	204 400	260 500	150 300	150-260 300-500	None
Coef. of Linear Thermal Expansion	In/in/°F	5.5	5.5	5.4	7.6	5.0	---	D-696 at 70° - 212° F
Dielectric (short term)Strength 10mil film	Volts/ mil	1200	1200	2000	2000	2000	Up to 1400	D149
Surface resistivity	Ohm/sq.	1.0E18	---	1.0E18	1.0E18	1.0E17	---	D257
Volume Resistivity	Ohm.cm	1.0e18	---	1.0E16	1.0E16	1.0E16	---	D257
Tensile Strength	Mpa @ 23° C	20	20	23	25	45	20-80	D1708
Elongation at Break	Percent @ 23° C	300	---	325	300	300	1-150	D1708

The values shown in the table represent average experience and are not intended to be specifications.

E = Excellent VG = Very Good G = Good F = Fair