

TETRON S is the trade name of virgin polytetrafluoroethylene (PTFE). Virgin PTFE contains no fillers and has almost universal chemical resistance.

### Mechanical Properties

Technical Data	Standard	Unit	Value
Specific Gravity	D792	-	2.15
Tensile Strength	D1457/D1708/D638	MPa (psi)	21-34 (3,000-5,000)
Elongation	D1457/D1708/D638		300-500
Flexural Modulus	D790	MPa (psi)	496 (72,000)
Folding Endurance	D2176	(MIT) cycles	>10 <sup>6</sup>
Impact Strength	D256	J/m (ft.lb/in)	189 (3.5)
Hardness	D2240	Shore D pencil	50-65 HB
Coefficient of Friction - Dynamic	D1894	-	0.05-0.10

### Thermal Properties

Technical Data	Standard	Unit	Value
Melting Point	D3418	°C (°F)	327 (621)
Cure Temperature	-	°C (°F)	379-429 (715-805)
Flame Rating*	UL94	-	VO
Limiting Oxygen Index	D2863	-	>95
Heat of Combustion	D240	MJ/kg (Btu/lb)	5.1 (2,200)

\*Statements regarding behaviour in a flame situation are not intended to reflect hazards presented by this or any other material when under actual fire conditions.

### Chemical Properties

Technical Data	Standard	Unit	Value
Chemical/Solvent Resistance	D543	-	Excellent
Water Absorption 24h	D570	-	<0.01
Salt Spray Resistance	B-117		
(1)			
- on aluminum		Hours	744+
- on steel		Hours	192
Detergent Resistance	-		
(2)			
- on aluminum		Hours	264
- on grit-blasted aluminum		Hours	624
- on grit-blasted steel		Hours	24
Weather Resistance	Florida Exposure	Years Unaffected	20

Notes: 1. Salt Spray Resistance: 5% NaCl at 35°C/95°F, hours to failure

2. Detergent Resistance: hours to failure

### Mechanical Properties

Technical Data	Standard	Unit	Value
Dielectric Constant	D150	1 MHz	2.1
Dielectric Strength*	D149	V/μm	18
Dissipation Factor	D150	1 MHz	<0.0001
Arc Resistance	D495	sec	>300
Volume Resistivity	D257	ohm-cm	>10 <sup>18</sup>
Surface Resistance	D257	ohm-sq	>10 <sup>18</sup>

\*Dielectric Strength: 100 micrometers film

Instructions for use, processing directives, products - or performance indications, as well as other technical statements are general guidelines provided by the manufacturer. Due to the variety of application purposes for each product, and different conditions (e.g. processing parameters, material properties, etc.), it is recommended that the user has to carry out his own individual qualifying tests.

Disclaimer: The values shown represent average experiences from numerous testing sources and are not intended to be specifications.