

Material: Polytetrafluoroethylene

Abbreviation: PTFE



**Short description of material:**

Polytetrafluoroethylene (PTFE) is a synthetic fluoropolymer of tetrafluoroethylene. Being hydrophobic, non-wetting, High density and resistant to high temperatures, PTFE Is an incredibly versatile material with a wide variety of Applications.

**Application Examples:**

- \* Valve Seat Rings.
- \* Washers.
- \* Gaskets.
- \* Seals.

Colors: White

Sr. No.	Properties	Standard Test Method (L-17/2)	Test Value	Standard Value Range (L-16)	Result
1	Composition	ASTM-D-4894	PTFE	PTFE	OK
	Make		GFL		OK
	Grade		610		OK
	Type		SEMI FREE FLOW		OK
	Batch No		211213A3		OK
2	Density	ASTM-D-792	2.15 gm/cc	2.1 – 2.2 gm/cc	OK
3	Tensile Strength	ASTM-D-638	280 Kg/cm <sup>2</sup>	210 – 375 Kg/cm <sup>2</sup>	OK
4	Elongation	ASTM-D-638	346%	250 – 400 %	OK
5	Compressive Strength	ASTM-D-695	50 Kg/cm <sup>2</sup>	40 – 50 Kg/cm <sup>2</sup>	OK
6	Deformation Under Load: 113 Kg			-	-
	Time = 2 Hrs	ASTM-D-621	10%	12 % MAX	OK
	Time = 24 Hrs		12%	15 % MAX	OK
7	Hardness	ASTM-D-2240	56 Shore D	52 – 58 Shore D	OK
8	Water Absorption	ASTM-D-570	0%	0 % MAX	OK
9	Heat Resistance	ASTM-D-648	0.01%	0.01 % MAX	OK
10	Continuous Service Temperature at Atmospheric Pressure	ASTM-D-648	-40+240°C	- 40 to 240 °C	OK
11	Wear Rate	ASTM-D-137	0.01 gm/s	0.01 gm/s MAX	OK
12	Dielectric Strength	ASTM-D-149	22 Kv/mm	22 – 24 Kv/mm	OK
13	Chemical Resistance			-	-
	I) Permeability	ASTM-D-543	0.01%	0.01 % MAX	OK
	II) Dissolution		0.01%	0.01 % MAX	OK
14	Dimensional Stability			-	-
	I) Length	ASTM-D-1710	2%	1.5 – 3 %	OK
	II) Diameter	ASTM-D-1710	0.5%	0.5 – 1 %	OK
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<b>Laboratory Conditions: -</b>	Room Temperature=	<b>30.°C</b>	Atmospheric Pressure=	<b>770 mm/hg</b>	Humidity=	<b>50</b>
<b>Remarks</b>	<b>OK</b>					

RESULTS ►	√ <b>ACCEPTED</b>	<del>A.O.D.</del>	<del>REJECTED</del>
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