



Technical Data Sheet PTFE

Yazd polymer

Properties	Method	unit	value
1. specific gravity	ASTM D792	-	2.14-2.20
2. tensile strength	ASTM D1457	N/mm ²	20-35
3. elongation at break	ASTM D1457	%	210-400
4. compressive strength 1% deformation	ASTM D695	N/mm ²	4-4.50
5. Deformation under load 14 N/mm ² for 24h	ASTM D621(1)	%	10-15
6. flexural strength 0.7 N/mm ²	ASTM D790	N/mm ²	No break
7. impact strength (Izod) 57 °C	ASTM D256	j/cm	1.10
8. impact strength (Izod) 23 °C	ASTM D256	j/cm	1.60
9. impact strength (Izod) 77 °C	ASTM D256	j/cm	3.30
10. hardness	ASTM D2240	(shore D)	50-60
11. friction coefficient – static	ASTM D3028	-	0.09
12. friction coefficient – dynamic	ASTM D3028	-	0.05
13. PTFE – steel oil lubricated	-	-	0.02-0.06
14. working temperature range	-	°C	-200 - +260
15. increase in volume from room temperature State (340 °C)	-	%	27-28
16. coefficient of thermal expansion from 25 to 100 °C	ASTM E831	°C ⁻¹	16×10 ⁻⁵
17. thermal conductivity	ASTM D2214	W/mK	0.20
18. specific heat 0 °C	-	Kj/kg.K	0.96
19. specific heat 50 °C	-	Kj/kg.K	1.05
20. temperature of distortion 0.46 N/mm ²	ASTM D648	°C	130-140
21. temperature of distortion 1.85 N/mm ²	ASTM D648	°C	50-60
22. dielectric strength (short- time air thickness 0.5 mm)	ASTM D149	kV/mm	55
23. dielectric constant	ASTM D150	-	2.10
24. dissipation factor	ASTM D150	-	<0.0002
25. volume resistivity	ASTM D257	Ohm/cm	10 ⁻¹⁷
26. surface resistivity	ASTM D257	Ohm	10 ⁻¹⁵
27. arc- resistance	ASTM D495	Sec	Ok (4)
28. water absorption	ASTM D570	%	<0.01
29. flammability ATB	ASTM D635	Sec	<5.00
30. flammability AEB	ASTM D635	mm	<5.00