

Performance parameters of EPDM for sealing SF₆ gas

NO.	Item		Index	Test method			
				GB	ISO	ASTM	DIN
1	Color		Black	/	/	/	/
2	Shore hardness,ShA		70±5	GB/T531.1	7619-1	D2240	53505
3	Brittleness temperature,°C		≤-60	GB/T1682	812	D2137	53546
4	Tensile strength,MPa		≥20/≥10	GB/T528	37	D412	53504
5	Elongation at failure,%		≥200/≥150				
6	Tear strength,kN/m		≥25.0	GB/T529	34	D624B	53506
7☆	Low temperature retraction TR10 , °C		≤-50	GB/T7758	2921	D1329	—
8☆	Hot air compression set	Compression 25%,125°C,24h,%	≤20.0	GB/T7759.1	815-1	D395	53517
		Compression 25%,100°C,72h,%	≤20.0				
		Compression 25%,100°C,1000h,%	≤30.0				
9	Hot air aging (125°C,72h)	Hardness change,degree	0 ~ +5	GB/T3512	188	D573	53508
		Change rate of tensile strength,%	≥-20				
		Change rate of elongation at failure,%	≥-25				
10	Ozone resistance static stretching cracking	Stretch 20%,96h,40°C, Ozone concentration 200×10 ⁻⁸	No creak	GB/T7762	1431-1B	D1149	53509
11	Vacuum resistance silicon grease 7501 test,120°C, 24h	Hardness change,degree	-2 ~ +2	GB/T1960	1817	D471	53521
		Change rate of volume,%	-2 ~ +2				