

Performance parameters of HNBR

NO.	Item		Index	Test method			
				GB	ISO	ASTM	DIN
1	Color		Black	/	/	/	/
2	Shore hardness,ShA		73±5	GB/T531.1	7619-1	D2240	53505
3	Brittleness temperature,°C		≤-45	GB/T1682	812	D2137	53546
4	Tensile strength,MPa		≥15.0	GB/T528	37	D412	53504
5	Elongation at failure,%		≥150				
6	Tear strength,kN/m		≥30.0	GB/T529	34	D624B	53506
7☆	Hot air compression set (compression 25%,125°C,24h),%		≤30.0	GB/T7759.1	815-1	D395	53517
8☆	Transformer oil compression set (compression 25%,125°C,168h),%		≤50.0				
9	Hot air aging (125°C,72h)	Hardness change,degree	0 ~ +10	GB/T3512	188	D573	53508
		Change rate of tensile strength,%	≥-20				
		Change rate of elongation at failure,%	≥-40				
10☆	Transformer oil resistance (125°C,168h)	Hardness change,degree	-8 ~ +2	GB/T1690	1817	D471	53521
		Change rate of volume,%	0 ~ +10				
11☆	Compatibility with transformer oil (800mL oil,surface area 65cm ² ,100°C, 164h)	Oil dielectric loss factor tanδ(90°C) increment(compared with pure oil)10 ⁻²	≤0.5	JB/T8448.1 Appendix A	—	D3455	—
12	Ozone resistance static stretching cracking	Stretch 20%,16h,40°C, Ozone concentration 50 ×10 ⁻²	No creak	GB/T7762	1431-1B	D1149	53509