HIGH TEMPERATURE RESISTANT SILICONE RUBBER

Characteristics

- Excellent physical and mechanical properties
- Wide range of applications
- Can be used at 250℃ for a long time and can withstand an instant temperature of 300℃

Applications

- Various refractory seals, rubber rolls and sealing joint strips, etc

Typical Data

Properties		Product Data							Test Method
		NE-G121	NE-G131	NE-G141	NE-G151	NE-G161	NE-G171	NE-G181	
Appearance		Light yellow, no obvious extraneous matter.							Visual Inspection
Density,g/cm³		1.00～1.06	1.03～1.13	1.08～1.18	1.10～1.20	1.14～1.24	1.17～1.27	1.20～1.30	ASTM D792
Curing	Hardness, Shore A	23±3	30±3	40±3	50±3	60±3	70±3	80±3	ASTM D2240
	Tensile Strength, MPa ≥	5.0	5.5	6.5	8.0		7.5	6.5	ASTM D412
	Elongation at Break, % ≥	650	550	450	380	320	220	180	
	Tension Set, % ≤	8	7		8			7	
	Tear Strength, Die C kN/m ≥	10	15	18	20			18	ASTM D624
Post-curing	Hardness, Shore A	24±3	31±3	41±3	53±3	63±3	72±3	83±3	ASTM D2240
	Tensile Strength, MPa ≥	4.5	6.0	7.0	7.5			7.0	ASTM D412
	Elongation at Break, % ≥	600		320	300	260	180	150	
	Tear Strength, Die C kN/m ≥	8	14	16	18		20	16	ASTM D624
Compression Set, 180℃*22h ≤		45	35	30		25			ASTM D395
Property variation percent during aging (250℃*72h)	Hardness,Shore A	-5	-3				4	5	/
	Tensile Strength, MPa ≥	-60	-35		-30			-15	/
	Elongation at Break, % ≥	-40	-20		-15	-20	-30	-15	/

Properties		Product Data					Test Method
		NE-G140	NE-G150	NE-G160	NE-G170	NE-G180	
Appearance		Milk-white, no obvious extraneous matter.					Visual Inspection
Density,g/cm³		1.08～1.18	1.10～1.20	1.14～1.24	1.17～1.27	1.20～1.30	ASTM D792
Curing	Hardness, Shore A	40±3	50±3	60±3	70±3	80±3	ASTM D2240
	Tensile Strength, MPa ≥	6.0	7.5		7.0	6.5	ASTM D412
	Elongation at Break, % ≥	420	380	320	220	180	
	Tension Set, % ≤	7	8			7	
	Tear Strength, Die C kN/m ≥	18	20			18	ASTM D624
Post-curing	Hardness, Shore A	44±3	55±3	65±3	75±3	85±3	ASTM D2240
	Tensile Strength, MPa ≥	6.0	7.0			6.5	ASTM D412
	Elongation at Break, % ≥	320	300		200	150	
	Tear Strength, Die C kN/m ≥	16	18			16	ASTM D624
Compression Set, 180℃*22h ≤		35		25	30	25	ASTM D395
Property variation percent during aging (250℃*72h)	Hardness,Shore A	-5	-6	-4	5	6	/
	Tensile Strength, MPa ≥	-45	-50		-40	-25	/
	Elongation at Break, % ≥	-20	-15	-20	-35	-20	/

Properties		Product Data					Test Method
		NE-G132	NE-G142	NE-G152	NE-G162	NE-G172	
Appearance		Milk-white, no obvious extraneous matter.					Visual Inspection
Density,g/cm³		1.03～1.13	1.08～1.18	1.11～1.21	1.15～1.25	1.17～1.27	GB/T 533-2008
Curing	Hardness, Shore A	30±2	40±2	50±2	60±2	70±2	GB/T 531.1-2008
	Tensile Strength, MPa ≥	7.5	8.0	8.5		8.0	GB/T 528-2009
	Elongation at Break, % ≥	600	550	500	400	300	
	Tension Set, % ≤	9	8				
	Tear Strength, Die C kN/m ≥	20	22	25			GB/T 529-2008
Post-curing	Hardness, Shore A	/	43±2	53±2	64±2	75±2	GB/T 531.1-2008
	Tensile Strength, MPa ≥	/	8.0		8.5	8.0	GB/T 528-2009
	Elongation at Break, % ≥	/	460	420	300	220	
	Tear Strength, Die C kN/m ≥	/	19	20			GB/T 529-2008
Compression Set, 180℃*22h ≤		/	38	35			GB/T 7759.1-2015
Property variation percent during aging (250℃*72h)	Hardness,Shore A	/	-5		5		/
	Tensile Strength, MPa ≥	/	-35	-30			/
	Elongation at Break, % ≥	/	-20	-15	-20	-30	/

- Physical data in the above table is for reference only.
- Curing condition: 175℃* 5Min. Post-curing condition:200℃* 4h.
- Ratio of curing agent liquid 2,5-Dimethyl-2,5-di(tert-butylperoxy)hexane: 0.65%.
- The supplied test report is obtained by the Quality Inspection Department with the curing conditions and testing method of the company; due to the difference of curing conditions and testing method, we can't guarantee that both parties obtain the same testing result, and we suggest that users should use the test data obtained under their own testing conditions as the reference for service performance. All the above performance data and application recommendations are only a reference for use on the service performance of product, instead of a guarantee on the effectiveness or general applicability of our products under a certain application.