

PRODUCT DATA SHEET FOR SILICONE RUBBER GASKET

Material Characteristics, Test Standards and Results of a typical Silicone Rubber Gasket

Description	Results
Hardness Range (Shore A)	20 ⁰ - 90 ⁰
Physical Strength	Very Good
Compression Set	Very Good
Tear & Abrasion Resistance	Very Good
Permeability to Gases	Very low
Ozone and UV Resistance	Excellent
Electrical Strength	Excellent
Extreme Temperature Resistance	Excellent

S. No.	Characteristics Tested	Standard Followed	Result as per Standard	Actual Results
1.	Hardness (Shore A)	ASTM-D2240	70 ⁰ (+/-5 ⁰)	68 ⁰
2.	Tensile Strength (MPa)	ASTM-D412	> 5	7
3.	Elongation at Break (%age)	ASTM-D412	> 125	220
4.	Tear Strength (N/mm)	ASTM-D624B	> 5	5.5

5.	100% Modulus (Kgf/cm ²)	ASTM-D412	-	
6.	Specific Gravity (max.)	ISO-2781	1.30	1.22
7.	Compression Set (max. %) At 175 ^o for 22 Hrs.	ASTM-D395	< 30	28
8.	AGE RESISTANCE	ASTM-D573		
a.	<i>Hardness</i>		+10 (max)	+3
b.	<i>Tensile Strength (%)</i>		+/-15% (max)	+5
c.	<i>Elongation at Break (%)</i>		+/-40% (max)	-18
9.	Ozone Resistance	ASTM-D1149	No visible Cracks	No visible Cracks
10.	Brittleness Temperature ^o C	No data	> -40 ^o C	-45 ^o C

TEMPERATURE CHARACTERISTICS

			@ 23° C	@ 200° C	@ -40° C
Tensile Strength	DIN 53504	N/mm ²	12	3.3	14.8
Elongation at Break	DIN 53504	%	610	370	910
Tear Resistance	ASTM D 624 B	N/mm	19	6.7	39.8
Compression Set	ASTM D 395 B	%	9		

Resistance to Steam :

Temperature	Resistance
120° C	6 months
130° C	3-4 months
140° C	6 weeks
150° C	10-12 Days
160° C	5-7 days

Resistance to Hot Air :

Temperature	Resistance
< 130° C	Several years
150° C	18 months
200° C	10 months
250° C	3-4 months
300° C	15 days