

# Fluorosilicone Base High Rebound Resilience

## Composition

Uncatalyzed fluorosilicone rubber based on fluorosilicone gum, and mixed evenly with some kinds of fillers and additives.

## Characteristics

AFS®-R-R1000 is translucent fluorosilicone base. It has integrated advantages that both the silicone rubber and fluororubber have.

1.It has better rebound resilience than normal ones of AFS®-R-M1000; 2.Wide application temperature range (-60°C~200°C); 3.Similar resistance to solvent & fuel oil to that of fluororubber; 4.Keeping high tensile force retention at high temperature which is like silicone rubber; 5.High insulation; 6. High selective permeability meets requirements of environmental protection.

Therefore it can be used as seal material in special condition with requirement of resistance to high and/or low temperature, oil and some other chemical mediums.

Items	Testing method	Index					
		R1040	R1050	R1060	R1070	R1080	R1090
Appearance	Eyeballing	translucent, smooth surface, without visible impurities					
Hardness (Shore A)	ASTM D2240	40±5	50±5	60±5	70±5	80±5	90±5
Specific Gravity (g/cm <sup>3</sup> )	ASTM D792	1.43±0.03	1.43±0.03	1.43±0.03	1.47±0.03	1.50±0.03	1.53±0.03
Tensile Strength (MPa) Die C	ASTM D412	≥9	≥9	≥9	≥8	≥7	≥6
Elongation at Break (%) Die C	ASTM D412	≥350	≥300	≥250	≥200	≥150	≥90
Tear Strength (KN/m) Die B	ASTM D624	≥20	≥20	≥20	≥15	≥15	≥15
Compression Set 177°C 22hr (25%) B type	ASTM D395	≤15	≤15	≤15	≤15	≤15	≤18
Vertical Rebound Resilience (%)	ASTM D2632	≥24	≥24	≥24	≥25	≥25	≥25
Volume Change (reference fuel B) (%) (23°C×70hr)	ASTM D471	≤22	≤22	≤22	≤22	≤22	≤20

Properties obtained using 0.53phr DBPH. Molded 15min at 170°C, post-cured 4hr at 200°C. If other cure temperature needed, vulcanization system shall be changed.

## Application

- 1.This is a kind of material with high rebound resilience, suitable for higher requirement in application.
- 2.Suitable for faster curing.
- 3.Can be applied in aviation industry, auto industry, petroleum chemical industry, medical and health care industry.

**Package** Plastic bags, 12.5kg per sack, 2 sacks in 1 carton.

**Storage** Shall be stored in dry and ventilated places at room temperature (25°C). Validity is 1 year.

**Transportation** Transport it as non-dangerous cargo.

## Attention:

- 1.The product shall be kept neutral, avoid being contacted with acid, alkaline substance.
- 2.The product can flow under its own weight. Keep it in good condition of packing during transportation and application in order it not to flow out.