

Fluorosilicone Base Low Fluorine Content

Composition

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

Characteristics

AFS®-R-M1200 is translucent fluorosilicone base. It has integrated advantages that both the silicone rubber and fluoro rubber have.

1.Wide application temperature range (-65°C~200°C), better low-temperature resistance than that of normal AFS®-R-M1000; 2.Similar resistance to solvent & fuel oil to that of fluororubber; 3.Keeping high tensile force retention at high temperature which is like silicone rubber; 4.High insulation; 5.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 solvents.

Items	Testing method	Index				
		M1240	M1250	M1260	M1270	M1280
Appearance	Eyeballing	translucent, smooth surface, without visible impurities				
Hardness (shore A)	GB/T 531.1	40±5	50±5	60±5	70±5	80±5
Tensile Strength (MPa) Die 1	GB/T 528	≥8	≥8	≥8	≥7	≥6
Elongation at Break (%) Die 1	GB/T 528	≥350	≥300	≥250	≥200	≥150
Tear Strength (KN/m) Die C	GB/T 529	≥20	≥20	≥20	≥15	≥15
Compression Set 177°C 22hr (25%) B type	GB/T 7759.1	≤25	≤25	≤25	≤25	≤25
Volume change (reference fuel B) (%) (23°C×70hr)	GB/T 1690	≤130	≤130	≤130	≤130	≤130

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.Aviation industry: seals in aircraft to resist to fuels and/or lubricants, such as O-rings, spacers, integral tank sealing, sensor material, diaphragms and clips for spacers.
- 2.Auto industry: used as sealing rings, grease seals, diaphragms, pipes and valve-linings for various types of vehicles.
- 3.Petrochemistry industry: sealing parts used in pump, valve and oil tank, which are used under high/low temperature and chemical circumstance.
- 4.Medical and health care: used in manufacturing medical apparatus or instruments, artificial visceral organs, such as medical pipes, medical hoses for fluids and artificial valves.

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.