

Technical Data Sheet



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Fluorosilicone Rubber LR-F5100

Description:

Chemical Name: Fluoro silicone gum

Synonyms: Fluorous silica gum

Equivalents:

Typical Technical Properties:

Test Item	Standard		
	Test Method	LR-5100A	LR-5100B
Appearance	Visual	Colorless transparent	Colorless transparent
Odour	No special odour	No special odour	No special odour
Molecular Weight (10 ⁴)	GBT-28610	50~70, 80~100, 110~130	50~70, 80~100
Vinyl Content (mol/%)	GBT-28610	0.05~1	0.05~1
Density (25°C, /cm)	GBT 2013-2010	1.25~1.30	1.05~1.23
Volatile Content (150°C, 3h %)	GBT-28610	≤1.0	≤1.0

Features:

- Advanced Fluid Barrier: Engineered with high-density trifluoropropyl groups to ensure exceptional resistance to non-polar solvents, automotive fuels, and jet propellants;
- Broad-Spectrum Resilience: Maintains high elastic integrity and flexibility across an operational window of -60°C to +200°C;
- Precision Cross-linking: Optimized vinyl content allows for customizable vulcanization, ensuring consistent mechanical properties in the final compound;
- Homogeneous Processability: Low volatile content and controlled molecular weight distribution allow for rapid filler incorporation and stable extrusion/molding;
- Superior Environmental Shield: Inherently stable against ozone, UV radiation, and atmospheric oxidation.

Applications:

The primary matrix for high-performance FVMQ compounds in aerospace and automotive sectors.

Used to upgrade the chemical resistance of standard methyl-vinyl silicone (VMQ) systems.

Base polymer for manufacturing inner liners of turbocharger hoses and fuel-resistant diaphragms.

Ideal for formulating reactive sealants and coatings for harsh chemical environments.

Package & Storage:

Packed in aluminum foil bag placed into carton, 20KGs/Carton.

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The offered information of this doc is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are fully satisfactory for end use. Suggestions of use shall not be taken as inducements to infringe any patent. Please confirm with us prior to any problems.

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Keep in cool, dry and ventilated place. Keep away from sunlight and fire sources. This product has cold-flow characteristics, should avoid bag breakage in the process of transportation and usage, shelf life is 24 months from the date of production. It is shipped as non-hazardous substance.

Storage beyond the shelf life does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.