

Technical Data Sheet



www.silfluo.com

Fluorosilicone Rubber LR-F5700

Description:

Chemical Name: Extruded Fluorosilicone Rubber

Synonyms: Fluorosilicone gum

Typical Technical Properties:

| Test Item | Standard | | |
|--|--|--|---------|
| | Test Method | LR-5760 | LR-5770 |
| Appearance | Visual | Translucent, smooth surface, no impurities | |
| Specific Gravity (g/cm3) | ASTM D792 | 1.44 | 1.48 |
| Hardness / shoreA | ASTM D2240 | 60 | 70 |
| Tensile Strength (MPa) | ASTM D412 | 10.5 | 10.1 |
| Elongation At Break (%) | ASTM D412 | 207 | 201 |
| Tear Strength (KN/m) | ASTM D624-B | 18 | 17 |
| *Heat Resistance 225°C X 72h | Hardness change / shore A | 4 | 5 |
| | Tensile strength change % | -27 | -24 |
| | Elongation at break change % | -26 | -23 |
| Fuel C Volume change/% 23°C X 72h | ASTM D471 | 21 | 20 |
| IRM903 Volume Change/% 150°C X 72h | ASTM D471 | 4.5 | 4 |
| Nitric acid/sulfuric acid/hydrochloric acid mixed solution PH < 1 100°C X 120h | | | |
| Acid Resistance Volume Change/% | ASTM D471 | 0.3 | 0.3 |
| 3% sodium hydroxide aqueous solution 60°C X 72h | | | |
| Alkali Resistance Volume Change/% | ASTM D471 | 0.4 | 0.3 |
| Curing Condition | 0.8 DCPH, Press cure: 120°C x 15min, Post cure: 200°C x 4h | | |

The above values are not intended for use in preparing specifications.

Heat resistance additives need to be added to meet the requirements of heat resistance.

Features

Nanjing Silfluo New Material Co., Ltd.

1 / 2

Web: www.silfluo.com Email: purchase@silfluo.com

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.

Technical Data Sheet



www.silfluosilicone.com

- Outstanding Media Resistance: Exhibits superior resistance to fuels (gasoline, diesel, and jet fuel), mineral oils, synthetic lubricants, and various non-polar solvents, maintaining an extremely low swell rate.
- Acid and Alkali Resistance: Demonstrates enhanced chemical stability and superior resistance to acid and alkaline environments compared to standard silicone rubber (VMQ).
- Extreme Temperature Range: Designed for long-term service in environments ranging from -60°C to +200°C, maintaining excellent flexibility and elasticity even at ultra-low temperatures.
- Weather Resistance: Highly resistant to ozone, UV radiation, and atmospheric aging, making it ideal for high-performance sealing in extreme outdoor environments.

Applications:

This product is suitable for DCPH-vulcanized extrusion molding.

1. Aerospace & Aviation: Fuel System Sealing Tubes: High-precision tubing for aircraft fuel delivery;
2. Engine Compartment Seals: Fire-wall and engine nacelle seals resistant to extreme heat and fluids;
3. Aviation Fuel-Resistant Tapes: Specialized sealant tapes for fuel tank and airframe maintenance;
4. Automotive Industry: Turbocharger Hose Liners: Inner liners for turbo hoses requiring high resistance to oil mist and gas;
5. Fuel Sensor Seals: Reliable gaskets for fuel level and pressure sensors;
6. EGR (Exhaust Gas Recirculation) Tubing: High-temperature tubing resistant to acidic exhaust condensates.
7. Industrial Sealing: Corrosive Media Delivery Hoses: Conveying tubes for aggressive chemicals and fluids in chemical plants;
8. Static Seals for Solvent Environments: Gaskets and O-rings for equipment operating in heavy solvent conditions;
9. Defense & Military Technology: Fuel-Resistant Conduits for Combat Vehicles: Durable fuel lines designed for military vehicles operating in extreme polar cold or desert heat.

Processing Advice:

It is recommended to use 0.8 ~ 1 phr. 2,4-Dichlorobenzoyl peroxide(DCPH).

The customer shall decide the optimum curing temperature and time according to the product dimensions and curing methods.

Package &Storage:

Packed in plastic bags placed into reinforced cardboard boxes. Each box contains 2 bags with 10kg per bag. 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 12 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.

Nanjing Silfluo New Material Co., Ltd.

2 / 2

Web: www.silfluo.com Email: purchase@silfluo.com

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.