



Technical Data Sheet

SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR)

60 Shore A hardness, 1 to 1 mix, 100% fluorosilicone rubber designed for liquid injection molding

Features & Benefits

- Excellent resistance against automotive fuels and oils
- Fast cure platinum technology, no cure by-products
- Cures over a wide temperature range: 130°C to 200°C
- High temperature resistance

Applications

- Solvent and chemically resistant membranes and gaskets
- Intricate parts with close tolerances
- Electrical/electronic connectors
- Extrusion onto wires, belts, fabrics, and other surfaces
- Gaskets and membranes for demanding static and dynamic sealing applications

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result
	Color Part A		Straw Yellow
	Color Part B		Translucent
CTM 1094	Viscosity Part A (shear rate 10 s ⁻¹)	Pa.s	850
CTM 1094	Viscosity Part B (shear rate 10 s ⁻¹)	Pa.s	850
As Molded²			
ASTM D792	Specific Gravity		1.42
ASTM D2240	Hardness	Shore A	60
DIN 53504, S2	Tensile Strength	MPa	6.5
DIN 53504, S2	Elongation at Break	%	220
ASTM D642B	Tear Strength	kN/m	14
ASTM D385	Compression Set	%	21 ³

1. CTM: Corporate Test Method, copies of CTM's are available on request.
ASTM: American Society for Testing and Materials.
DIN: Deutsche Industrie Norm.
2. Cure conditions, as molded 10 minutes at 120°C
3. Tested according to method B, type II (6 mm), molded buttons, 22 hours 175°C

Typical Properties (Cont.)

Test	Property	Unit	Result
Post Cured⁴			
ASTM D2240	Hardness	Shore A	62
DIN 53504, S2	Tensile Strength	MPa	7.0
DIN 53504, S2	Elongation at Break	%	225
ASTM D624B	Tear Strength	kN/m	15
ASTM D385	Compression Set	%	11 ³
ASTM D471	Fluid Resistance – 168 Hours Volume Swell⁵		
	Dexron III, 125°C	%	1
	IRM 903, 150°C	%	2
	Reference Fuel C, 60°C	%	21
	Reference FAM B, 60°C	%	29
	E85, 60°C	%	12
	RME Biodiesel, 40°C	%	3
	Reference Fuel F, Diesel, 40°C	%	2
	MIL-T-83133E, JP-8, 23°C	%	6

4. Post-cured 4 hours at 200°C
5. Injection molded slab, post-cured 4 hours at 200°C

Description

SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR) is specifically designed for liquid injection molding. The product is supplied as a two-part component, soft fluorosilicone paste. It heat cures to a 60 durometer material. The cured rubber product is resistant to a wide variety of solvents and chemicals over a wide temperature range of -63 to +175°C (-82° to +347°F) under immersion conditions, and up to +225°C (+437°F) in dry heat.

How to Use

Mixing and De-Airing

SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber is a two-part material supplied as parts A and B, which should be combined in a 1:1 ratio.

Meter mix equipment which pumps, meters and mixes the two components without the incorporation of air is strongly recommended for production.

Pot Life

After the A and B components are mixed, SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber will remain usable for at least 72 hours at room temperature.

Cure Rate

The cure time for SILASTIC™ FL 60- 9201 Fluoro Liquid Silicone Rubber is a function of cure temperature and the thickness and dimensions of the part to be cured. The material, cures within seconds when heated to 150°C (302°F). The cure time for a particular part is determined by the time required to heat the silicone material to this temperature. It can be optimized for the particular part dimensions to be molded.

How to Use (Cont.)**Cure Inhibition**

The cure mechanism of this product can be inhibited by amines, sulfur, tin complexes, and some peroxides. Care should be taken to avoid contamination that would lead to cure inhibition.

Clean-Up/Removal

Solvents such as DOWSIL™ OS fluids, mineral spirits, naphtha, toluene and xylene can be used to clean up uncured product. IPA can also be used.

**Handling
Precautions**

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

**Usable Life and
Storage**

When stored at or below 32°C (90°F) in the original unopened containers, this product has a usable life of 18 months from the date of production.

**Packaging
Information**

This product is supplied in lot matched pail kits (2 x 22 kg).

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

**Health and
Environmental
Information**

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

**Disposal
Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

**Product
Stewardship**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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