

# **Silastic® FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR)**

## **FEATURES**

- Cures over a wide temperature range: 130°C to 200°C
- Fast cure platinum technology, no cure by-products
- Retains elasticity at low temperatures: TR10 -66°C, Tg -68°C
- Resists high temperatures
- 2-part with convenient 1:1 mix ratio
- Excellent resistance against automotive fuels and oils

## **BENEFITS**

- Produces flashless parts
- Suitable for use in highly automated injection molding processes
- Allows intricate parts with close tolerances
- Enables short process cycle times
- Provides reliable sealing

60 durometer, pigmentable, 100 % Fluorosilicone Rubber designed for liquid injection molding

## **APPLICATIONS**

- Solvent and chemically resistant molded parts
- Intricate parts with close tolerances
- Gaskets and membranes for demanding static and dynamic sealing applications
- Extrusion onto wires, belts, fabrics, and other surfaces
- Thin, high-precision coatings

## **TYPICAL PROPERTIES**

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

<b>Test<sup>1</sup></b>	<b>Property</b>	<b>Unit</b>	<b>Result</b>
	Color Part A		Light yellow
	Color Part B		White
CTM 1094	Viscosity Part A (shear rate 10 s <sup>-1</sup> )	Pa.s	850
CTM 1094	Viscosity Part B (shear rate 10 s <sup>-1</sup> )	Pa.s	850
	<b>As molded<sup>2</sup></b>		
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 D624B	Tear Strength	kN/m	14
ASTM D385	Compression Set	%	21 <sup>3</sup> /28 <sup>4</sup>
	<b>Post-cured<sup>2</sup></b>		
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 <sup>3</sup> /20 <sup>4</sup>
	<b>Fluid resistance - volume swell<sup>5</sup></b>		
ASTM D 471	IRM 903, 168 hrs 150°C	%	3.0
	Biodiesel, 168 hours 40°C	%	3.7
	Reference Fuel C, 168 hours 23°C	%	20.9
	FAM B, 168 hours 23°C	%	23.9

<sup>1</sup>CTM: Corporate Test Method, copies of CTM's are available on request.

ASTM: American Society for Testing and Materials.

DIN: Deutsche Industrie Norm.

<sup>2</sup>Cure conditions, as molded 10 minutes at 120°C, Post-cured 4 hours at 200°C.

<sup>3</sup>Tested according to method B, type II (6mm) molded buttons, 22 hours 175°C.

<sup>4</sup>Tested according to method B, type II (6mm), plied disks, 22 hours 177°C.

<sup>5</sup>Injection molded slab, Post-cured 4 hours at 200°C.

## DESCRIPTION

*Silastic*<sup>®</sup> FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR) is specifically designed for liquid injection molding. The product is supplied as a two 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

*Silastic* FL 60-9201 Fluoro Liquid Silicone Rubber is a two-component 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 48 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.

### 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 *Dow Corning*<sup>®</sup> 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 MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEB SITE AT DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING 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 (2x 22kg).

## 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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our Web site, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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