

# SiSiB® FSE9851 High Resilience Fluorosilicone Rubber

## INTRODUCTION

SiSiB® FSE9851 is a 50 Shore A, off-white uncatalyzed fluorosilicone rubber base offering excellent resistance to solvents, fuels, and oils. It provides high resiliency, low compression set, and good mechanical strength across a broad temperature range. The material is designed for extrusion, calendaring, or molding applications requiring enhanced chemical resistance and dimensional stability.

## KEY FEATURES

- Wide operating temperature range of -60°C to 230°C
- Low compression set
- Easily processed & easily pigmented
- Excellent fuel and solvent resistance
- High resilience and good tensile strength
- Can be post-cured for improved properties

## PHYSICAL PROPERTIES

Items	Result	Method
Density (g/cm <sup>3</sup> )	1.43	ASTM D792
Hardness (Shore A)	50	ASTM D2240
Tensile Strength (MPa)	9.9	ASTM D412
Elongation (%)	370	ASTM D412
Tear Strength (KN/m)	21	ASTM D624-B
Compression Set (177°C, 22h)	8.0	ASTM D395
Resilience (%)	40	ASTM D1054
Volume Change (Fuel C, 23°C, 72h) %	+18	ASTM D471
<b>Heat Resistance (225°C, 72h)</b>		
Hardness change/shore A	+3	ASTM D573
Tensile strength change (%)	-23	ASTM D573
Elongation at break change (%)	-22	ASTM D573

### Curing agent:

0.8 pbw 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane(DHBP).

### Curing conditions:

10min/170°C, post-curing: 4h/200°C in hot air.

*These values are not intended for use in preparing specifications.*

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### APPLICATIONS

SiSiB® FSE9851 is ideal for the production of low compression set molded, extruded, and calendered parts, such as:

- O-rings, gaskets, oil seals
- Fuel-line quick-connect seals
- Sealing strips, diaphragms, membranes
- Valves, hydraulic and electrical clamp blocks

Thanks to its excellent fluid resistance and thermal stability, SiSiB® FSE9851 is widely used in the following industries:

- Automotive
- Aerospace
- Petrochemical

### PACKING

SiSiB® FSE9851 fluorosilicone is supplied in 20kg boxes.

### STORAGE

In the unopened original container, it has a shelf life of one year in a dry and cool place.

### HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

### NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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