

## Silflex Limited

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# **TECHNICAL DATA SHEET – SM02**

DESCRIPTION	Silicone Rubber Compound, vulcanising on heating. Specifically designed for hoses to meet SAEJ20.	
SPECIAL PROPERTIES	Stable over a range of temperatures -55°C to +225°C Good compromise of mechanical properties No post cure Excellent calenderability Good compression set Moderate oil resistance	
<u>CHARACTERISTICS</u>	Type (AFNOR T 40002) Specific gravity at 25°C, approx. Natural Colour	MVQ 1.17 Blue

# PROPERTIES AFTER PROCESSING

#### 1. **Mechanical properties**

1.1	After curing 8 minutes at 115°C Shore A hardness, approx. Tensile strength, MPa, approx. Elongation at break, %, approx. Tear strength, kN/m, approx. Compression set (22h/177°C/25%), %, approx. Compression set (70h/125°C/25%), %, approx.	67 7.9 297 13 24 13
2.	Heat stability	
2.1	Properties after ageing 10 days at 200°C Shore A hardness, approx. Tensile strength, MPa, approx. Elongation at break, %, approx. Tear strength, kN/m, approx.	66 7.3 250 10
2.2	Properties after ageing 70 hours at 175°C Shore A hardness, approx. Tensile strength, MPa, approx. Elongation at break, %, approx.	65 8.1 (-6%) 285 (-7%)



Registered in England No. 2569811



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#### 3. Fluid resistance

3.1 Properties after immersion in coolant (Havoline XLC, new generation, at 50% in water) for 3 days at boiling point. Chara A hardn

Shore A hardness, approx.	67 (U pts)
Tensile strength, MPa, approx.	7.2 (-9%)
Elongation, %, approx.	279 (-6%)
Volume change, %, approx.	0

3.2 Properties after immersion in coolant (Havoline XLC, new generation, at 50% in water) for 21 days at boiling point.

Shore A hardness, approx.	64 (-3 pts)	
Tensile strength, MPa, approx.	6.2 (-22%)	
Elongation, %, approx.	246 (-17%)	
Volume change, %, approx.	0	

- 3.3 Properties after immersion in coolant (Glaceol) for 70 hours at boiling point. Shore A hardness, approx. 64 (-1 pts) Tensile strength, MPa, approx. 6.9 (-19%) Elongation, %, approx. 300 (-3%) Volume change, %, approx. +2
- 3.4 Properties after immersion in coolant (Liquid D at 50% in water) for 70 hrs at boiling point.

Shore A hardness, approx.	62 (-3 pts)
Tensile strength, MPa, approx.	7.1 (-18%)
Elongation, %, approx.	255 (-17%)
Volume change, %, approx.	+1

3.5 Properties after immersion for 70 hours at 150°C in IRM 903 oil. Shore A hardness, approx. 48 (-17 pts) Tensile strength, MPa, approx. 6.7 (-22%) Elongation, %, approx. 235 (-24%) Volume change, %, approx. +26

Manufacture of automotive hoses by calendering. **APPLICATIONS** 

The elastomer is delivered in 25 kg cardboard boxes or 500 kg cardboard PACKAGING containers.

STORAGE AND The elastomer should be able to be stored in its original unopened packaging SHELF LIFE at a temperature below +35°C for up to 3 months from the date of manufacture.

Date of manufacture should be marked clearly on the packaging.



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Certificate Nº FM33476

