



Via Emilia,292 – 40068 San Lazzaro di Savena (BO)

Tel. 0516258101/102 – Fax. 0516258098

[www.sixten.it](http://www.sixten.it) – [sixten@sixten.it](mailto:sixten@sixten.it)

## **Material Data Sheet S103-BL85**

### **Silicone-blue S103 (FDA, peroxide cross linked)**

#### **General**

S103-BL85 is a blue Methyl Silicone Rubber, commonly referred to as Silicone. Silicone materials are often used in hot air and in applications where chemicals and foodstuff are in contact with the sealing material. Because of lower mechanical properties Silicone materials should not be used for dynamic applications. Silicone S103 – blue is approved for the use of applications in contact with foodstuff.

#### **Physical properties**

Density:	DIN 53479	g/cm <sup>3</sup>	1,54	±0,03
Hardness at 23°C:	DIN 53505	Shore A	85	±5
100% Modulus:	DIN 53504	N/mm <sup>2</sup>	6,1	*
Tensile strength:	DIN 53504	N/mm <sup>2</sup>	7,5	*
Elongation at break:	DIN 53504	%	117,3	*
Tear strength:	DIN 53515	kN/m	24,8	*
Rebound resilience:	DIN 53512	%	39,0	*
Compression set, 24h, 70°C, 25%:	DIN 53517	%	3,6	*
Compression set, 24h, 100°C, 25%:	DIN 53517	%	4,8	*
Compression set, 22h, 175°C, 25%:	DIN 53517	%	10,8	*

\* mentioned values are subject to a tolerance of +/- 25%

**Temperature range:** -55°C to 180°C

#### **Chemical resistance**

Resistant to: Water up to 90°C, Steam below 120°C, HFA, HFB, HFC Fluids, HFD-R, HFD-S Fluids, Vegetable Oils, Ozone, Oxygen, Air up to 200°C

Not Resistant to: Silicone Oils, Fuels

#### **Main application**

Static and dynamic seals (standard and special), wipers, O-rings, flange seals, rotary seals, rubber energizers (preload elements). Due to its low mechanical properties it should be used for static applications only. Chemical and food industry.

#### **Available certificates**

- Conform to (EC) No 1935/2004 and (EC) No 10/2011
- Conform to positive list of FDA 21 CFR 177.1680