

**Grade:** Soft Medium - 300kg/m<sup>3</sup>

**Availability:**

- Sheeting
- Sealing strip and gaskets
- Pressure sensitive adhesive backing
- Cords, Tubes
- Profiles, Joined rings
- Extruded sections
- Available in grey and black

**Temperature Ranges:**

- -60°C (-76°F) to 230°C (446°F) and up to 250°C (482°F) intermittent

**Specifications:**

- CBF soft-medium silicone meets UL94 V-0 at 1.5mm and above, approval reference E235077
- Closed cell with low water absorption and dust ingress, capable of meeting IP67
- Product meets the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(i) and (a)(1)(ii) vertical, (a)(1)(iv) and (a)(1)(v) horizontal, (a)(2)(ii) and (a)(2)(iii) 45 degrees flammability tests and automotive standard PART 571FMVSS302.
- CBF soft-medium meets ASTM D1056 2D2

**Environment Resistance:**

- Silicone products have excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation, and weathering in general

**Typical Applications:**

- Aerospace, Automotive, Electronics, Heating and Ventilation (HVAC), Mass Transit & Military

**General Characteristics:**

Test	Result	Standard
<b>Brittle Point</b>	-80°C (-112 °F)	ASTM D746
<b>Radiation Resistance</b>	>10 <sup>5</sup> Grays (10 <sup>7</sup> Rads) typical	

**Mechanical Properties:**

Property	Units	CBF Sil V-0 Soft-Medium	Test Method
*Density	Kg/m <sup>3</sup> lb.ft <sup>-3</sup>	300 19.4	BSENISO 845 ASTM D3574
**Compression Stress 25% strain	kPa psi	37 5.4	ASTM D1056
**Compression Stress 40% strain	kPa psi	80 13.1	BSENISO 3386 part 1, 2
Tensile Strength	kPa psi	305 44.1	BSENISO 1798 ASTM D412
Elongation at failure	%	90	BSENISO 1798 ASTM D412
Compression Set 50% compression 24 hours recovery. 22 hours @ 70 °C (158°F)	%	<1	BSENISO 1856
22 hours @ 100°C (212 °F)	%	3	ASTM D1056

Additional information

- (\*) Density measured on 25mm diameter cord samples. The density of samples of different sizes
- (\*\*) Compression stress measured on samples defined in BSENISO 3386 & ASTM D1056 respectively
- The compressive stress on samples of different dimensions, especially thickness may vary from that quoted here

**Flammability Properties:**

Property	Units	CBF Sil V-0 Soft-Medium	Test Method
UL94 Vertical Burn	Minimum Thickness (mm)	V-0 @ 1.5	UL94
FAR 25 app. F sec A 1 (i) & (ii)	Minimum Thickness (mm)	1.5	FAR 25 App.F sec A 1 (i)
Limiting Oxygen Index	%	43.9	EN ISO 4589-2: OI
Flame spread (CFE)	kW/m <sup>2</sup>	2mm = 26.57 25mm = 20.87	ISO 5658-2
Smoke/Toxicity 50 kWm <sup>-2</sup>	D <sub>s</sub> (4)  VOF <sub>4</sub> min  CIT <sub>g</sub>	2mm = 55 25mm = 57  2mm = 159 25mm = 154  2mm = 0.03 25mm = 0.04	EN ISO 5659-2
Cone Calorimeter 50 kWm <sup>-2</sup>	MARHE kWm <sup>2</sup>	2mm = 76.67 25mm = 68.14	ISO 5660-1
Smoke Density 25 kWm <sup>-2</sup>	D <sub>s</sub> Max	2mm = 18 25mm = 31	EN ISO 5659-2
Toxicity 600°C	CIT <sub>NLP</sub>	2mm = 0.02 25mm = 0.05	NF X 70-100-1 & 2

**EN 45545-2 Rating:**

Property	Description	Thickness Range (mm)	CBF Sil V-0 Soft Medium
R1	Interior surfaces (non-listed interior products >0.2m <sup>2</sup> )	2 – 25	HL2
R2	Limited surfaces	2 – 25	HL3
R3	Strips	2 – 25	HL3
R7	Gangway surfaces, ducting (& non-listed exterior products >0.2m <sup>2</sup> )	2 – 25	HL2
R8	Roof (external)	2 – 25	HL2
R10	Floors and cavity walls	3 – 50	-
R17	Cab housing	2 - 25	HL2
R21	Seating & Mattress materials	3 – 50	-
R22	Interior seals (& non-listed interior products <0.2m <sup>2</sup> )	2 – 25	HL3
R23	Exterior seals (& non-listed interior products <0.2m <sup>2</sup> )	2 – 25	HL3