



KB102F—Soft Silicone Foam

KB102F is soft silicone foam material made of addition molded polydimethylsiloxane, with small and uniform pore size. It is an environmentally friendly polymer material. Compared with foam products made of traditional materials, this material has the characteristics of non-toxic and environmentally friendly, anti compression deformation, excellent creep resistance, good insulation and flame retardant properties. In addition, this material can withstand extreme temperatures, ultraviolet radiation, and ozone, and has excellent mechanical fatigue resistance, making it an ideal material for various high-performance shock absorption, sealing, cushioning, sound insulation, protection, insulation, and flame retardancy.

Key features:

- 1、Low compression set and high creep resistance;
- 2、Excellent flame retardancy, low smoke density toxicity, high oxygen index;
- 3、High electrical insulation.
- 4、Wide operation temperature range, capable of continuous operation from -60 °C to 200 °C;
- 5、Environmentally friendly with zero VOC.



Applition:

- 1、Used for various damping and cushioning in assembly lines of aerospace, high-speed rail, automobiles, energy storage, etc;
- 2、Used for various types of sealing, applied to assembly lines such as new energy PACK and electrical cabinets;
- 3、Used for various insulation, flame retardancy, low VOC, sound insulation, insulation, protection, etc.



Customized products:

1. The maximum width dimension is 1200 mm, the minimum thickness is 0.5 mm, the maximum thickness is 30 mm, and the standard width is 1000mm or 500mm;
2. Provide single-sided or double-sided pressure-sensitive adhesive backing for easy bonding of surfaces with different interfaces;
3. Provide single-sided or double-sided film coating to maintain the shape of die cut products;
4. Dimensional tolerances for foam silicone: comply with the allowable dimensional tolerances in GB/T18944.1-2003 for polymer porous elastic materials, sponges, and porous rubber products.

The information contained in this document is intended to assist you in designing with KOMPA high-performance foam materials. It is not intended to and does not constitute any express or implied warranty, including any warranty of merchantability or fitness for a particular purpose, nor does it guarantee that users can achieve the results shown in this material selection guide for specific purposes. Users should be responsible for determining the suitability of KOMPA high-performance foam materials in each application.



KB102F—Technical Data Sheet of Silicone Foam:

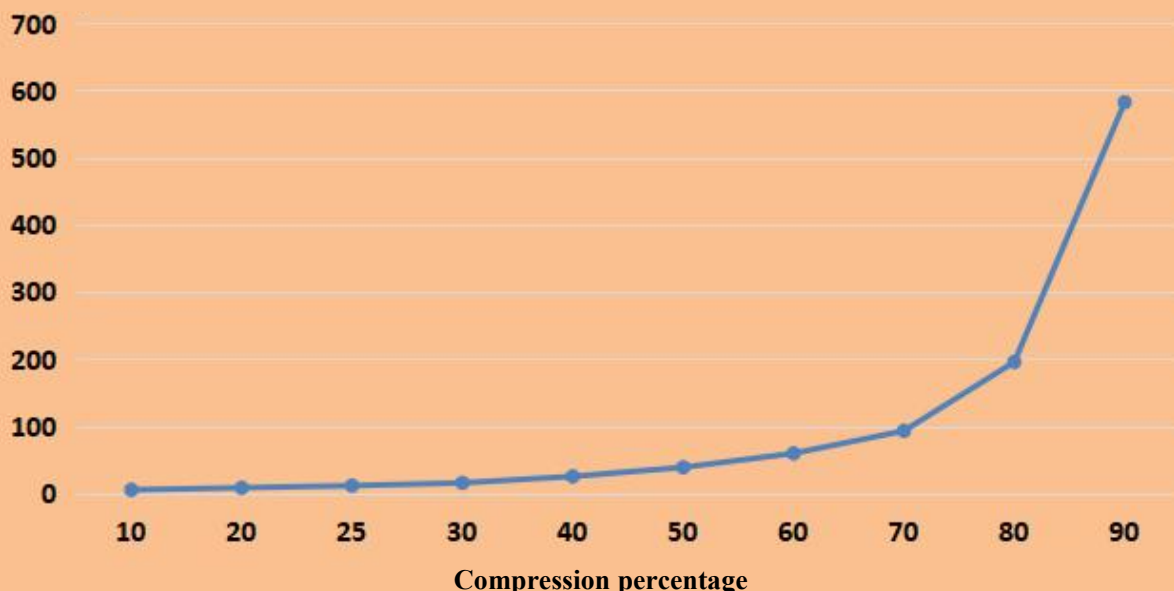
Properties	Test method	Hard series typical value
		KB102F
Color	Visualization	black/grey/red/white
Standard width (mm)	GB/T17794-2021	500/1000
Density (g/cm ³)	ASTM D 1056	0.24±0.03
Hardness HC	GB/T 531.1-2008	9±5
Hardness H00	GB/T 531.1-2008	40±10
Tensile strength (kpa≥)	ASTM D 412	≥120
Elongation at break (%≥)	ASTM D 412	≥80
Compression set stress (Kpa)	ASTM D 1056 compress 25%	30±10
Permanent compression deformation (100°C@50%)	ASTM D 1056	≤5.0
Low temperature bending (-55°C)	ASTM D1056-14	pass
Water absorption rate (%≤)	ASTM D 1056	≤5.0
Flame retardancy / smoke toxicity		
Flame retardancy UL-V0/EN45545-2	UL94/EN45545-2	pass
Flame spread index (Ls)	ASTM E 162	<35
Smoke density (Ds)	ASTM E 662-2015	<50
Toxicity Emission Rating	SMP-800-C	pass
Electrical and thermal performance		
Dielectric strength (KV/mm)	ASTM D 149	≥3.0
Volume resistivity (Ω·cm)	ASTM D 257	≥1.0*10 ¹⁴
Usage temperature (°C)	SAEJ-2236	-60~200
Thermal conductivity [W/(m.K)]	ASTM C 518	0.06
Environment protection		
Environmental testing REACH/ROHS2.0	pass	

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KB102F -12 G Compression set stress curve data sheet

Test Record kpa



Standard thickness tolerance	Thickness (mm)	Tolerance (mm)	Standard Cutting width tolerance	Width (mm)	Tolerance (mm)
	$1 \leq T \leq 3$	± 0.3		$W \leq 300$	± 3
	$3 < T \leq 5$	± 0.4		$450 \leq W \leq 650$	± 5
	$5 < T \leq 9$	± 0.6		$650 < W \leq 920$	± 7
	$10 < T \leq 15$	± 1.0		$W \geq 1000$	± 10
	$15 < T \leq 20$	± 1.5			

Remarks:

- KB-101F-3GFA 'KB' Represents Kompa '1' Represents Kompa product serial number '01' Represents the density of the foam 'F' Stands for foam abbreviation (Foam) '3' Represents the thickness of the foam 'G' Represents the color grey of the foam 'F' Short for protective film 'A' Short for Adhesive
- The typical value is the average value of the overall performance data, if you need to know the technical specification value, please contact Jiangsu Kompa New Material Co., LTD.

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