

BISCO® HT-1200 Series

BISCO® HT-1200 general purpose solid silicone series offers resistance to high temperatures, tear, and most fluids for a variety of industrial applications. Material is compliant with A-A-59588, AMS 3301-3305, FDA 21 CFR 177.2600, and NSF 51/61 (File MH62230).

PROPERTY	TEST METHOD	STANDARD DUROMETER			
PHYSICAL					
Description		1240	1250	1260	1270
Color	Visual	Red (Stocked) Black, Gray, White (Made to Order)			
Thickness, mm (inches)	Internal	0.79 - 3.18 (0.031 - 0.125)			
Specific Gravity, (g/cc)	Internal	1.1	1.16	1.23	1.29
Durometer, Shore A	ASTM D2240	40 ± 5	50 ± 5	60 ± 5	70 ± 5
Compression Set, %	ASTM D395 150°C (302°F) / 70 hrs / 25%	≤ 25	≤ 25	≤ 25	≤ 25
Tensile Strength, MPa (psi)	ASTM D412	7.65 (1110)	7.1 (1030)	6.95 (1010)	7.2 (1050)
Tensile Elongation, %	ASTM D412	≥ 240	≥ 200	≥ 150	≥ 125
EFFECTS OF DRY HEAT AGING					
Change in Hardness, Shore A (pts)		±10	±10	±10	±10
Change in Tensile Strength, %	ASTM D573 225°C (437°F) / 70 hrs	-20	-20	-20	-25
Change in Elongation, %		-40	-40	-40	-40
EFFECTS OF WATER IMMERSION					
Change in Volume, %	ASTM D471 100°C (212°F) / 70 hrs	+10	+5	+5	+5
EFFECTS OF OIL IMMERSION					
Change in Hardness, Shore A (pts)		-10 to +5	-10 to +5	-10 to +5	-10 to +5
Change in Tensile Strength, %		-10	-10	-10	-10
Change in Elongation, %	ASTM D471 150°C (302°F) / 70 hrs	-15	-15	-15	-15
Change in Volume, %		+5	+5	+5	+5

PROPERTY	TEST METHOD	STANDARD DUROMETER			
THERMAL PROPERTIES		1240	1250	1260	1270
Low Temperature Brittleness, °C (°F)	ASTM D2137 -68 (-80)	Pass	Pass	Pass	Pass
Recommended Use Temperature, °C (°F)	Internal	-62 to 218 (-80 to 425)			

Standard Thickness Tolerances

NOMINAL THICKNESS	TOLERANCE
mm (inches)	mm (inches)
0.787 (0.031)	± 0.127 (± 0.005)
1.600 (0.063)	± 0.165 (± 0.007)
2.388 (0.094)	± 0.254 (± 0.010)
3.175 (0.125)	± 0.432 (± 0.017)

Slit Material and Tape (PSA) Width Tolerances

NOMINAL WIDTH	TOLERANCE
mm (inches)	mm (inches)
> 0 - 76 (> 0 - 3)	± 1.60 (± 0.063)
> 76 - 203 (> 3 - 8)	± 2.39 (± 0.094)
> 203 - 305 (> 8 - 12)	± 3.18 (± 0.125)
> 305 - 610 (> 12 - 24)	± 4.78 (± 0.188)
> 610 - 914 (> 24 - 36)	+ 25.4/- 0 (+ 1/- 0)

VALUE ADDED OFFERINGS

- Adhesive (PSA) lamination
- Slit material/tapes

Notes:

- All metric conversions are approximate. Reference US customary units for official values and tolerances.
- Additional technical information is available.
- Values should not be used for specification limits.