

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 Class 2 A/B, AMS 3301-3305, FDA 21 CFR 177.2600, and NSF 51 (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 D751	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
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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.