



Product Data Sheet

**BISCO® HT-820**

BISCO® HT-820 firm exhibits enhanced sealing capabilities, with comparable tear and tensile strength of a traditional sponge rubber. Patented chemistry and cell structure provide long term performance advantage.

Features & Benefits, applicable to all BISCO® Cellular Materials (Foams):

- Temperature independency
- UV/Ozone resistant
- Rated to most stringent flame standards

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
<b>PHYSICAL</b>			
Color	Visual	<b>Gray</b>	---
Thickness, mm (inches)	Internal	<b>0.79 - 12.70</b> <b>(0.031 - 0.500)</b>	See "Width Tolerance" table
Density, kg/m <sup>3</sup> (lb./ft <sup>3</sup> )	Internal	384 (22)	<b>336 - 528</b> <b>(21 - 33)</b>
Compression Force Deflection, kPa (psi)	ASTM D1056	106 (15.3)	<b>82 - 138</b> <b>(12 - 20)</b>
Compression Set, %	ASTM D1056 100°C (212°F) / 22 hrs / 50%	2.6	< 10
Water Absorption, %	Internal 2" below water surface / 24 hrs / change in weight	0.5	< 5

Specification values in bold are tested on a batch basis.  
 Further industry specifications tested in tables below.

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
<b>FLAMMABILITY</b>			
Flame Resistance	UL 94 (File E83967)	Meets	V-0 ; HF-1
Flame Spread Index (Is)	ASTM E162	Meets	Flaming Mode < 35
Smoke Density (Ds)	ASTM E662	Meets	Flaming Mode, 1.5 min, < 100 Flaming Mode, 4.0 min, < 200
Burn Length	FMVSS 302	Meets	< 100 mm/min



The information contained in this Data Sheet is intended to assist you in designing with Rogers' Elastomeric Material Solutions. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown in this Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers BISCO products for each application. The Rogers logo, BISCO, and the BISCO logo are trademarks of Rogers Corporation or one of its subsidiaries. © 2003, 2006, 2007, 2009, 2017, 2019, 2020 Rogers Corporation. All rights reserved. 0720-PDF • Publication #180-071 [www.rogerscorp.com](http://www.rogerscorp.com)

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
<b>THERMAL</b>			
Temperature Range, °C (°F)	Internal	-55 to +200 (-67 to +392)	---
Thermal Conductivity, W/m °K	ASTM D518	0.09	---
Low Temperature Flex	ASTM D1056 -55°C (-67°F) / 5 hrs	Pass	---
Low Temperature Brittleness	ASTM D746 -55°C (-67°F) / 3 min	Pass	---

#### Standard Thickness Tolerances

NOMINAL THICKNESS	TOLERANCE
mm (inches)	mm (inches)
0.79 (0.031)	± 0.381 (± 0.015)
1.59 (0.063)	± 0.508 (± 0.020)
2.39 (0.094)	± 0.508 (± 0.020)
3.18 (0.125)	± 0.635 (± 0.025)
4.78 (0.188)	± 0.635 (± 0.025)
6.35 (0.250)	± 0.762 (± 0.030)

#### 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 - 457 (> 12 - 18)	± 4.78 (± 0.188)
> 457 - 660 (> 18 - 26)	± 5.56 (± 0.219)
> 660 - 914 (> 26 - 36)	+ 25.4/- 0 (+ 1/- 0)

#### VALUE ADDED OFFERINGS

- Adhesive (PSA) lamination
- Slit material/tapes

#### SPECIFICATION

- AMS3196

#### Notes:

\*Typical Value- Value is based on historical data. Please note the frequency of testing varies.

\*\*Specification- Applies to physical properties only, which are based on Rogers' internal benchmark and standard BISCO specification values. Additional industry specifications are available as well. All other properties are based on industry standard guidelines.