

BISCO® HT-6360

Fire-Safe Solid Silicone

BISCO® HT-6360 fire-safe solid silicone is part of the performance grade series and designed to protect sensitive applications from flame damage. It helps solve safety and design issues in various industrial and transportation markets, such as fire barriers and smoke seals for rail car passenger compartments.

Features & Benefits:

- Provides fire protection in enclosed compartments
- High tear strength and extremely tight thickness tolerances for gasket integrity
- Superior flame, smoke, and toxicity (FST) resistance performance
- Resistance to UV, ozone, extreme temperatures, and most fluids for consistent performance across many environments

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|-----------------------------|---|---|-----------------|
| PHYSICAL | | | |
| Color | Visual | Black | --- |
| Thickness, mm (inches) | Internal | 0.500 - 3.18 (0.020 - 0.125) | --- |
| Specific Gravity, (g/cc) | Internal | 1.71 | --- |
| Durometer, Shore A | ASTM D2240 | 60 | 60 ± 5 |
| Compression Set, % | ASTM D395 150°C (302°F) / 70 hrs / 25% | < 35 | --- |
| Tensile Strength, MPa (psi) | ASTM D412 | > 1.38 (> 200) | --- |
| Elongation, % | ASTM D412 | > 125 | --- |

Specification values in bold are tested on a batch basis.

Further industry specifications tested in tables below.

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|--------------------------------|-------------|------------------|-----------------|
| ELECTRIC | | | |
| Dielectric Strength, Volts/mil | ASTM D149 | 386 | --- |
| Dielectric Constant, 1 kHz | ASTM D150 | 2.76 | --- |
| Dissipation Factor, 1 kHz | ASTM D495 | 0.003 | --- |
| Dry Arc Resistance, Seconds | ASTM D495 | 124 | --- |
| Volume Resistivity, Ohm-cm | ASTM D257 | 10 ¹⁴ | --- |

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|-------------------------|---------------------|----------------|--|
| FLAMMABILITY | | | |
| Flame Resistance | UL 94 (File E83967) | Meets | V-0 |
| Flame Spread Index (Is) | ASTM E162 | Meets | Flaming Mode < 35 |
| Smoke Density (Ds) | ASTM E662 | Meets | 1.5 min, Flaming Mode < 100 4.0 min, Flaming Mode < 200 |

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|------------------------------|-------------------------------------|------------------------------|-----------------|
| THERMAL | | | |
| Temperature Range, °C (°F) | Internal | -55 to +200 (-67 to +392) | --- |
| Thermal Conductivity, W/m °K | ASTM D518 | 0.10 | --- |
| Low Temperature Brittleness | ASTM D2137 -62°C (-80°F) / 3 min | Pass | --- |

Standard Thickness Tolerances

| NOMINAL THICKNESS | TOLERANCE |
|-------------------|--------------------------------------|
| mm (inches) | mm (inches) |
| 0.508 (0.020) | + 0.076/- 0.051 (+ 0.003/- 0.002) |
| 0.787 (0.031) | ± 0.102 (± 0.004) |
| 1.600 (0.063) | ± 0.152 (± 0.006) |
| 3.175 (0.125) | ± 0.203 (± 0.008) |

Liner

Material is shipped between one or two polycarbonate carriers for easy handling based on product thickness. Liner must be removed prior to die cutting to allow the material to shrink and relax.

| THICKNESS | CONSTRUCTION |
|----------------|----------------------------------|
| mm (inches) | Liner type |
| ≤0.787 (0.031) | Polycarbonate Liner Two Sides |
| >0.787 (0.031) | Polycarbonate Liner One Side |

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.

All metric conversions are approximate. Reference US customary units for official values and tolerances.

For more information and to request a sample, please contact our team of experts at solutions@rogerscorp.com

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 ≥ 0.787mm (0.031")
- Slit material/tapes