

BISCO® HT-6210

Extra Soft Solid Silicone

BISCO® HT-6210 extra soft solid silicone is a part of the performance-grade series designed to handle the most demanding gasketing applications. This material bridges the gap between foams and high durometer solids. Low Shore OO durometer, high tear strength, and extremely tight thickness tolerances achieve superior sealing where high performance is required.

Features & Benefits:

- Softness enables a highly protective seal that requires less closure force
- Low shore OO durometer, high tear strength, and extremely tight thickness tolerances for gasket integrity
- Resistance to UV, ozone, extreme temperatures, and most fluids for consistent performance across many environments

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|-----------------------------|---|---|--------------------------------------|
| PHYSICAL | | | |
| Color | Visual | Gray | --- |
| Thickness, mm (inches) | Internal | 0.250 - 3.18 (0.010 - 0.125) | --- |
| Specific Gravity, (g/cc) | Internal | 1.07 | --- |
| Durometer, Shore OO | ASTM D2240 | 61 | 62 ± 4 |
| Compression Set, % | ASTM D395 150°C (302°F) / 22 hrs / 50% | < 25 | --- |
| Tensile Strength, MPa (psi) | ASTM D412 | 3.3 (480) | > 1.4 (> 200) |
| Elongation, % | ASTM D412 | 565 | > 400 |
| Tear Resistance, ppi | ASTM D624 | > 20 | --- |

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 | 372 | --- |
| Dielectric Constant, 1 kHz | ASTM D150 | 2.76 | --- |
| Dissipation Factor, 1 kHz | ASTM D495 | 0.003 | --- |
| Dry Arc Resistance, Seconds | ASTM D495 | 122 | --- |
| Volume Resistivity, Ohm-cm | ASTM D257 | 10 ¹⁴ | --- |

| 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 | 0.19 | --- |
| Low Temperature Brittleness | ASTM D2137 -62°C (-80°F) / 3 min | Pass | --- |

Standard Thickness Tolerances

| NOMINAL THICKNESS | TOLERANCE |
|-------------------|--------------------------------------|
| mm (inches) | mm (inches) |
| 0.254 (0.010) | ± 0.051 (± 0.002) |
| 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) |

Width Tolerances

| NOMINAL WIDTH | TOLERANCE |
|---------------|-------------------------|
| mm (inches) | mm (inches) |
| 914 (36) | + 25.4/- 0 (+ 1/- 0) |

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.