

Liquid Silicone Rubber Technical Data



| | | Test Method | HT-6135 | HT-6210 | HT-6220 | HT-6240 | |
|---------------------------------|--|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----|
| Typical Physical Properties | Durometer, Shore "A" (pts) | ASTM D-2240 | 35 | 10 | 20 | 40 | |
| | Tensile Strength, psi (MPa) | ASTM D-412 | 800 (5.5) | 250 (1.7) | 800 (5.5) | 800 (5.5) | |
| | Elongation, % | ASTM D-412 | 450 | 500 | 650 | 250 | |
| | Tear Strength, pli (kN/m) | ASTM D-624 | 70 (12.3) | 25 (4.4) | 55 (9.6) | 75 (13.1) | |
| | Compression Set, % 70 hr @ 302°F (150°C) | ASTM D-395(B) | 30 | 35 | 35 | 35 | |
| Effects of Dry Heat Aging | 70 hr. @ 437°F (225°C) | Change in Hardness, Shore "A" (pts) | ASTM D-573 | ±5 | ±5 | ±5 | ±5 |
| | | Change in Tensile Strength, % | ASTM D-573 | -15 | -15 | -15 | -15 |
| | | Change in Elongation, % | ASTM D-573 | -30 | -40 | -40 | -40 |
| Effects of Oil Immersion | 70 hr. @ 302°F (150°C) | Change in Hardness, Shore "A" (pts) | ASTM D-471 | ±5 | ±5 | ±5 | ±5 |
| | | Change in Tensile Strength, % | ASTM D-471 | -20 | -35 | -35 | -35 |
| | | Change in Elongation, % | ASTM D-471 | -20 | -40 | -40 | -40 |
| | | Change in Volume, % | ASTM D-471 | +15 | +10 | +10 | +10 |
| Electrical & Thermal Properties | Dielectric Constant | ASTM D-150 | 3.0 | 3.0 | 3.0 | 3.0 | |
| | Dielectric Strength, Volts/mil | ASTM D-149 | 500 | 400 | 400 | 400 | |
| | Volume Resistivity, Ohm - cm | ASTM D-257 | 10 ¹⁴ | 10 ¹⁴ | 10 ¹⁴ | 10 ¹⁴ | |
| | Thermal Conductivity, BTU in/hr/ft ² /°F (W/m °K) | ASTM C-518 | 1.5 (0.21) | 1.5 (0.21) | 1.5 (0.21) | 1.5 (0.21) | |
| Environmental Resistance | Volume Change from Water Immersion %, 70 hr. @ 212°F (100°C) | ASTM D-471 | +5 | +5 | +5 | +5 | |
| | Low Temperature Embrittlement, °F (°C) | ASTM D-2137 | -80 (-62) | -80 (-62) | -80 (-62) | -80 (-62) | |
| | Intermittent Upper Temperature Limit, °F (°C) | Rogers Internal | 500 (260) | 500 (260) | 500 (260) | 500 (260) | |
| | Recommended Use Temperature, °F (°C) | SAE J-2236 | -80 to 425 (-62 to 218) | -80 to 425 (-62 to 218) | -80 to 425 (-62 to 218) | -80 to 425 (-62 to 218) | |
| Dimensions | Available Thickness Range, inches (mm) | | 0.010 to 0.125 (0.3 to 3.2) | 0.010 to 0.032 (0.3 to 0.8) | 0.010 to 0.063 (0.3 to 1.6) | 0.010 to 0.125 (0.3 to 3.2) | |
| | Standard Widths, inches (mm) | | 36 (914) | 36 (914) | 36 (914) | 36 (914) | |
| | Standard Colors | | Cream | Gray | Black | Transparent | |

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