



ENGLISH

## Datasheet

# RS PRO Silicone O-Ring

Stock Number: 527-9790

SPEC: ASTM D2000 M5GE706 A19 B37 EA14 EO16 EO36 F19 G11 Z1

Z1 COLOUR: RUST

|             | <u>Original Physical Properties</u>   | <u>Requirements</u> | <u>Results</u> |
|-------------|---|---------------------|----------------|
|             | Hardness, (Shore A) (ASTM D2240-05)   | 70±5                | 72             |
|             | Tensile Strength, psi (Mpa) (ASTM D412-06a)   | 870 (minimum)       | 968 (6.67)     |
|             | Elongation, (%) (ASTM D412-06a)   | 150 (minimum)       | 235            |
| <u>G11</u>  | Tear resistance, (KN/m) (ASTM D624-00, die B)   | 9 (minimum)         | 12.87          |
|             | Modulus at 100%, psi, (Mpa) (ASTM D412-06a)   |                     | 645 (4.44)     |
|             | Specific Gravity (g/cm <sup>3</sup> )   |                     | 1.31           |
| <u>A19</u>  | <u>Heat Age, 70 Hrs @ 225°C (ASTM D573-04)</u>  |                     |                |
|             | Hardness Change, pts  | +10 (maximum)       | +3             |
|             | Tensile Strength Change, %  | -25 (maximum)       | -5             |
|             | Elongation Change, %  | -30 (maximum)       | -26            |
|             | Weight Change, %  |                     | -2.3           |
| <u>B37</u>  | <u>Compression Set, 22 Hrs @ 175°C (ASTM D395-03, Method B)</u>                             |                     |                |
| <u>EA14</u> | <u>Water Resistance, 70 Hrs @ 100°C (ASTM D471-12a)</u>                                     |                     |                |
|             | Hardness Change, pts  | ±5                  | ±2             |
|             | Tensile Strength Change, %  |                     | -5             |
|             | Elongation Change, %  |                     | -22            |
|             | Volume Change, %  | ±5                  | +1.7           |
| <u>EO16</u> | <u>IRM901 Oil, 70 Hrs @ 150°C (ASTM D471-12a)</u>   |                     |                |
|             | Hardness Change, pts  | -15 - 0             | -3             |
|             | Tensile Strength Change, %  | -20 (maximum)       | +2             |
|             | Elongation Change, %  | -20 (maximum)       | -11            |
|             | Volume Change, %  | 0 - +10             | +4.2           |
| <u>EO36</u> | <u>IRM903 Oil, 70 Hrs @ 150°C (ASTM D471-12a)</u>   |                     |                |
|             | Hardness Change, pts  | -30 (maximum)       | -16            |
|             | Tensile Strength Change, %  |                     | -15            |
|             | Elongation Change, %  |                     | -22            |
|             | Volume Change, %  | +60 (maximum)       | +35.2          |
| <u>F19</u>  | <u>Low-Temperature Brittleness Point Test, 3 minutes at -55°C (ASTM D2137-11, Method A)</u> |                     |                |
|             | Sample type: T-50   |                     |                |
|             | Coolant: Isopropyl alcohol  |                     |                |
|             | Brittleness temperature to nearest 1°C  | No Croack           | Pass           |