



ENGLISH

## Datasheet

# RS PRO Silicone O-Ring

Stock Number: 527-9813

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            |
| <b>G11</b>  | 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           |
| <b>A19</b>  | <b><u>Heat Age, 70 Hrs @ 225°C (ASTM D573-04)</u></b>                                              |                     |                |
|             | Hardness Change, pts                                                                               | +10 (maximum)       | +3             |
|             | Tensile Strength Change, %                                                                         | -25 (maximum)       | -5             |
|             | Elongation Change, %                                                                               | -30 (maximum)       | -26            |
|             | Weight Change, %                                                                                   |                     | -2.3           |
| <b>B37</b>  | <b><u>Compression Set, 22 Hrs @ 175°C (ASTM D395-03, Method B)</u></b>                             |                     |                |
| <b>EA14</b> | <b><u>Water Resistance, 70 Hrs @ 100°C (ASTM D471-12a)</u></b>                                     |                     |                |
|             | Hardness Change, pts                                                                               | ±5                  | ±2             |
|             | Tensile Strength Change, %                                                                         |                     | -5             |
|             | Elongation Change, %                                                                               |                     | -22            |
|             | Volume Change, %                                                                                   | ±5                  | +1.7           |
| <b>EO16</b> | <b><u>IRM901 Oil, 70 Hrs @ 150°C (ASTM D471-12a)</u></b>                                           |                     |                |
|             | Hardness Change, pts                                                                               | -15 - 0             | -3             |
|             | Tensile Strength Change, %                                                                         | -20 (maximum)       | +2             |
|             | Elongation Change, %                                                                               | -20 (maximum)       | -11            |
|             | Volume Change, %                                                                                   | 0 - +10             | +4.2           |
| <b>EO36</b> | <b><u>IRM903 Oil, 70 Hrs @ 150°C (ASTM D471-12a)</u></b>                                           |                     |                |
|             | Hardness Change, pts                                                                               | -30 (maximum)       | -16            |
|             | Tensile Strength Change, %                                                                         |                     | -15            |
|             | Elongation Change, %                                                                               |                     | -22            |
|             | Volume Change, %                                                                                   | +60 (maximum)       | +35.2          |
| <b>F19</b>  | <b><u>Low-Temperature Brittleness Point Test, 3 minutes at -55°C (ASTM D2137-11, Method A)</u></b> |                     |                |
|             | Sample type: T-50                                                                                  |                     |                |
|             | Coolant: Isopropyl alcohol                                                                         |                     |                |
|             | Brittleness temperature to nearest 1°C                                                             | No Croack           | Pass           |