FREUDENBERG
SEALING TECHNOLOGIES

Technical data sheet in accordance with ASTM

# Material
# 90 NBR N904R

black

cross linking: sulfur

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| Physical properties | nominal range | typical values | |
|---|---|---|---|
| **Density**<br>ASTM D297, 23 °C | --- | 1.32 | g/cm³ |
| **Hardness**<br>ASTM D2240, Shore A, 23 °C | 90 ±5 | 88 | Shore |
| **Tensile strength**<br>ASTM D412, C, 23 °C | > 10 | 16.6 | MPa |
| **Elongation at break**<br>ASTM D412, C, 23 °C | > 100 | 119 | % |
| **Compression set**<br>ASTM D395, Slab B, 22 h, 100 °C | < 25 | 6 | % |

**Declarations of conformity**
**No data found!**

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**Tested after ASTM D 2000: M 7 BG 910 B14 EF11 EF21 EO14 EO34 Z1**

| | | | nominal range | typical values |
|---|---|---|---|---|
| | Hardness | Shore | 90 ±5 | 88 |
| | Tensile strength | MPa | min. 10 | 16.6 |
| | Elongation at break | % | min. 100 | 119 |
| **A14** | **Change after aging in Air 70h/100°C** | | | |
| | Hardness | Shore A | --- | 3 |
| | Tensile strength | % | --- | -4 |
| | Elongation at break | % | --- | -15 |
| **B14** | **Compression set 22h/100°C** | % | 25 | 6 |
| **EF11** | **Change after aging in Fuel A 70h/23°C** | | | |
| | Hardness | Shore A | ±10 | 0 |
| | Tensile strength | % | -25 | -14 |
| | Elongation at break | % | -25 | -5 |
| | Volume | % | -5 to 10 | 0 |
| **EF21** | **Change after aging in Fuel B 70h/23°C** | | | |
| | Hardness | Shore A | 0 to -30 | -9 |
| | Tensile strength | % | -60 | -25 |
| | Elongation at break | % | -60 | -21 |
| | Volume | % | 0 to 40 | 12 |
| **EO14** | **Change after aging in IRM 901 70h/100°C** | | | |
| | Hardness | Shore A | ±5 | 5 |
| | Tensile strength | % | -25 | -7 |
| | Elongation at break | % | -45 | -19 |
| | Volume | % | -10 to 5 | -5 |
| **EO34** | **Change after aging in IRM 903 70h/100°C** | | | |

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| | | | | |
|---|---|---|---|---|
| | Hardness | Shore A | -10 to 5 | -2 |
| | Tensile strength | % | -45 | -1 |
| | Elongation at break | % | -45 | -12 |
| | Volume | % | 0 to 25 | 5 |
| **Z1** | **Density ASTM D297, 23 °C** | g/cm³ | --- | 1.32 |

The given values are based on a limited number of tests on standard test pieces (2mm sheets). The data from finished parts can deviate from above values depending on the manufactories process and the component geometry.

The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. All questions regarding the guarantee of this product are in line with our terms and conditions, inasmuch as statutory provisons do not plan for something else.

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