



Material 90 FKM V904W

General Data

Version Released on 24.09.2021

Colour: black
Type of cross-linking: Bisphenol cure system

Compression set ASTM D 395, B, 70 h, 175 °C, max., plied

Nominal Range Typical Value Physical Properties Density ASTM D1817 2.01 g/cm³ Hardness ASTM D 2240, Shore A 90 ±5 86 Shore Tensile strength ASTM D 412 >14 16 MPa Elongation at break ASTM D 412 >100 128 % Compression set ASTM D 395, B, 70 h, 200 °C, max., plied <50 25.1 %

This data sheet supersedes all previous versions. The content is subject to change without prior notice. The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. The data from finished parts can deviate from above values depending on the manufacturing 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 provisions do not plan for something else.

<30

Print date: 20.10.2025

%

16.7

Global Material Technology

Email: FIS.Compound.CRC@fst.com





Material 90 FKM V904W

Version 01

Released on 24.09.2021

Tested after ASTM D 2000: M 3 HK 9 14 A1-10 B37 B38 EF31 EO78 Z1

| ASTM Property | | Nominal Range | Typical Value |
|------------------------------------|-------|---------------|---------------|
| | | | |
| Tensile strength | MPa | min. 14 | 16 |
| Hardness | Shore | 90 ±5 | 86 |
| Elongation at break | % | min. 100 | 128 |
| A1-10 Air 70.00h/250.00°C | | | |
| Elongation at break | % | -25 | -6 |
| Hardness | Shore | 10 | 4 |
| Tensile strength | MPa | -25 | -3 |
| B37 22.00h/175.00°C | | | |
| Compression set | % | 30 | 16.7 |
| B38 22.00h/200.00°C | | | |
| Compression set | % | 50 | 25.1 |
| EF31 Fuel C 70.00h/23.00°C | | | |
| Tensile strength | MPa | -25 | -16 |
| Volume change | % | 0 to 10 | 1.9 |
| Elongation at break | % | -20 | -9 |
| Hardness | Shore | ±5 | -1 |
| EO78 Fluid No. 101 70.00h/200.00°C | | | |
| Tensile strength | MPa | -40 | -19 |
| Volume change | % | 0 to 15 | 12 |
| Hardness | Shore | -15 to 5 | -8 |
| Elongation at break | % | -20 | 6 |
| Z1 ASTM D792, | | | |
| Modulus | MPa | | 13.42 |
| Specific gravity | g/cc | | 2.014 |

Freudenberg Industrial Services GmbH

Global Material Technology
Email: FIS.Compound.CRC@fst.com





Material 90 FKM V904W

| | | Version 01 | Released on 24.09.2021 |
|--------------------------------|------|----------------------|-------------------------------|
| Z1 DIN 53504, S2, 100 %, 23 °C | | | |
| Modulus | MPa | 13.4 | 2 |
| Specific gravity | g/cc | 2.01 | 4 |

This data sheet supersedes all previous versions. The content is subject to change without prior notice. The given values are based on a limited number of tests on standard test pieces (2mm sheets) produced in the laboratory. The data from finished parts can deviate from above values depending on the manufacturing 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 provisions do not plan for something else.

Print date: 20.10.2025

Global Material Technology

Email: FIS.Compound.CRC@fst.com