

## Material 42 CR 764

black

cross linking: Metallic oxide

**revision index**  
6

**revision date**  
12/21/2011

**page** 1 / 3

### Physical properties

|                                                     | nominal range | typical values |                   |
|-----------------------------------------------------|---------------|----------------|-------------------|
| <b>Density</b><br>DIN EN ISO 1183-1                 | 1.37 ±0.02    | 1.37           | g/cm <sup>3</sup> |
| <b>Hardness</b><br>DIN ISO 7619-1                   | 42 ±5         | 42             | Shore             |
| <b>Rebound resilience</b><br>DIN 53512              | ---           | 46             | %                 |
| <b>Modulus</b><br>100 %, DIN 53504, S2              | > 0.7         | 1.5            | MPa               |
| <b>Tensile strength</b><br>DIN 53504, S2            | > 12          | 15             | MPa               |
| <b>Elongation at break</b><br>DIN 53504, S2         | > 300         | 400            | %                 |
| <b>Compression set</b><br>DIN ISO 815, 22 h, 100 °C | < 35          | 26             | %                 |

**Temperature range** -40°C to 100°C

### Declarations of conformity

|              | Country | Part | Remark                                            | Expires | unlimited                           |
|--------------|---------|------|---------------------------------------------------|---------|-------------------------------------|
| RoHS conform |         |      | including EU 2011/65 and<br>EU2015/863 (ROHS III) |         | <input checked="" type="checkbox"/> |

### Freudenberg

Freudenberg Sealing Technologies  
Global Material Technology  
Wolfgang Becker  
Telefon: +49 (0)6201/80-2893  
Fax: +49 (0)6201/88-2893  
Email: wolfgang.becker@FST.com

## Material 42 CR 764

black

cross linking: Metallic oxide

revision index

6

revision date

12/21/2011

page 2 / 3

Tested after ASTM D 2000: M 2 BC 410 A14 B14 EO14 EO34 F17 G21

|                                                                         |       | nominal<br>range | typical<br>values |
|-------------------------------------------------------------------------|-------|------------------|-------------------|
| Hardness                                                                | Shore | 40 ±5            | 42                |
| Tensile strength                                                        | MPa   | min. 10          | 12.5              |
| Elongation at break                                                     | %     | min. 500         | 690               |
| <b>A14 Change after aging in Air 70h/100°C</b>                          |       |                  |                   |
| Hardness                                                                | Shore | 15               | 1                 |
| Tensile strength                                                        | %     | -15              | -10               |
| Elongation at break                                                     | %     | -40              | -7                |
| <b>B14 Compression set 22h/100°C</b>                                    |       |                  |                   |
|                                                                         | %     | 35               | 23                |
| <b>EO14 Change after aging in IRM 901 70h/100°C</b>                     |       |                  |                   |
| Hardness                                                                | Shore | ±10              | 2                 |
| Tensile strength                                                        | %     | -30              | -18               |
| Elongation at break                                                     | %     | -30              | -19               |
| Volume                                                                  | %     | -10 to 15        | -3                |
| <b>EO34 Change after aging in IRM 903 70h/100°C</b>                     |       |                  |                   |
| Tensile strength                                                        | %     | -70              | -60               |
| Elongation at break                                                     | %     | -55              | -50               |
| Volume                                                                  | %     | 120              | 70                |
| <b>F17 Low-temperature resistance after 3 min at -40 °C 3min./-40°C</b> |       |                  |                   |
|                                                                         | °C    | pass             |                   |
| <b>G21 Tear Resistance &gt;= 10 MPa 23°C</b>                            |       |                  |                   |
|                                                                         | MPa   | 26               | 29                |

The material possess an excellent ozone and weather resistance. The diesel fuel- and mineral oil resistance are sufficient.

This material contains a SVHC-substance <0,1%. (Imidazolidin-2-thion CAS-No. 96-45-7) in the vulcanized parts.

### Freudenberg

Freudenberg Sealing Technologies  
Global Material Technology  
Wolfgang Becker  
Telefon: +49 (0)6201/80-2893  
Fax: +49 (0)6201/88-2893  
Email: wolfgang.becker@FST.com

## Material 42 CR 764

black

cross linking: Metallic oxide

| revision index | revision date | page  |
|----------------|---------------|-------|
| 6              | 12/21/2011    | 3 / 3 |

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 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.

### Freudenberg

Freudenberg Sealing Technologies

Global Material Technology

Wolfgang Becker

Telefon: +49 (0)6201/80-2893

Fax: +49 (0)6201/88-2893

Email: wolfgang.becker@FST.com