

Technical data sheet in accordance with ASTM

# Material

## 70 NBR N701R

black

cross linking: sulfur

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7/28/2021

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### Physical properties

#### nominal range

#### typical values

#### Density

ASTM D1817, 23 °C

1.28 ±0.02

1.28

g/cm<sup>3</sup>

#### Hardness

ASTM D2240, Shore A, 23 °C

70 ±5

73

Shore

#### Modulus

100 %, ASTM D412, C, 23 °C

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MPa

#### Tensile strength

ASTM D412, C, 23 °C

> 14

18.4

MPa

#### Elongation at break

ASTM D412, C, 23 °C

> 250

506

%

#### Temperature range

-40°C to 100°C

#### Declarations of conformity

No data found!

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Tested after ASTM D 2000: M 2 BG 714 B14 EA14 EF11 EF21 EO14 EO34 Z1

|                                                             |         | nominal<br>range | typical<br>values |
|-------------------------------------------------------------|---------|------------------|-------------------|
| Hardness                                                    | Shore   | 70 ±5            | 73                |
| Tensile strength                                            | MPa     | min. 14          | 18.4              |
| Elongation at break                                         | %       | min. 250         | 506               |
| <b>A14 Change after aging in Air 70h/100°C</b>              |         |                  |                   |
| Hardness                                                    | Shore A | ---              | 7                 |
| Tensile strength                                            | %       | ---              | 6                 |
| Elongation at break                                         | %       | ---              | -16               |
| <b>B14 Compression set 22h/100°C</b>                        |         |                  |                   |
|                                                             | %       | 25               | 8                 |
| <b>EA14 Change after aging in Distilled water 70h/100°C</b> |         |                  |                   |
| Hardness                                                    | Shore A | ±10              | -2                |
| Volume                                                      | %       | ±15              | 4                 |
| <b>EF11 Change after aging in Fuel A 70h/23°C</b>           |         |                  |                   |
| Hardness                                                    | Shore A | ±10              | 0                 |
| Tensile strength                                            | %       | -25              | -6                |
| Elongation at break                                         | %       | -25              | -8                |
| Volume                                                      | %       | -5 to 10         | 0                 |
| <b>EF21 Change after aging in Fuel B 70h/23°C</b>           |         |                  |                   |
| Hardness                                                    | Shore A | 0 to -30         | -11               |
| Tensile strength                                            | %       | -60              | -24               |
| Elongation at break                                         | %       | -60              | -26               |
| Volume                                                      | %       | 0 to 40          | 15                |
| <b>EO14 Change after aging in IRM 901 70h/100°C</b>         |         |                  |                   |
| Hardness                                                    | Shore A | -5 to 10         | 7                 |
| Tensile strength                                            | %       | -25              | 5                 |

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|-----------------------------------------------------|------------------------------------|---------|----------|-------|
| 1                                                   | 7/28/2021                          |         |          |       |
|                                                     | Elongation at break                | %       | -45      | -19   |
|                                                     | Volume                             | %       | -10 to 5 | -7    |
| <b>EO34 Change after aging in IRM 903 70h/100°C</b> |                                    |         |          |       |
|                                                     | Hardness                           | Shore A | -10 to 5 | 0     |
|                                                     | Tensile strength                   | %       | -45      | 2     |
|                                                     | Elongation at break                | %       | -45      | -16   |
|                                                     | Volume                             | %       | 0 to 25  | 3     |
| <b>Z1</b>                                           | <b>Specific Gravity ASTM D1817</b> | g/cc    | ---      | 1.28  |

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 provisions do not plan for something else.

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