

NBR 60.10-01

Sealing Technology Technical Data Sheet

General compound description

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|---|---|
| Material name, short description | NBR |
| Material name, based on technical standards | Acrylic-Butadiene-Rubber |
| Compound Code | NBR 60.10-01 |
| Material description / intended use | Elastomer with a good resistance against mineral and vegetable oils and greases, alkalis, alcohols, gas, water, glycolics and saline solutions. |
| Color | black |
| Remarks | D2000 SAEJ200-M2 BG 610 A14 B14 EA14 EF11 EF21 EO14 EO34 F15 |

Mechanical properties

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|---------------------|---|
| Density | 1.19 g/cm ³ ± 0.03 ASTM D 297 |
| Hardness | 60 Shore A ± 5 |
| Tensile strength | 12 MPa ASTM D 412-C |
| Elongation at break | 300 % ASTM D 412-C |
| Compression set | 12.0 % ASTM D 395-B 22 h, 100 °C, deformation 25% 28 % DIN 53517-A 70 h, 125 °C, deformation 25% |
| Tear resistance | 40 N/mm ASTM D 624-B |

Chemical state change

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|-------------------|---|
| Air aging | |
| Value change 1 | Hardness: +5 Points Tensile strength: +15 % Elongation at break: -20 % Test norm: ASTM D 573 Test parameter: 70 h, 100 °C |
| Storage in medium | |
| Value change 1 | Medium: IRM 901 Oil (ASTM 1) Hardness: +6 Points Tensile strength: +12 % Elongation at break: -22 % Volume: -8 % Test norm: ASTM D 471 Test parameter: 70 h, 100 °C |
| Value change 2 | Medium: IRM 902 Oil (ASTM 2) Hardness: 0 Points Volume: -1 % Test norm: DIN 53521 Test parameter: 168 h, 100 °C |

Thermal properties

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|-------------------------------|---|
| Min. operating temperature | -30 °C |
| Max. operating temperature | 125 °C |
| Note to operating temperature | approximate value, dependent of the application |
| TR 10 value | -28 °C ASTM D 1329 |
| Brittleness point | -30 °C ASTM D 2137-A |

| | |
|----------------|---|
| Value change 3 | Medium: IRM 903 Oil (ASTM 3) Hardness: -5 Points Tensile strength: +4 % Elongation at break: -15 % Volume: +10 % Test norm: ASTM D 471 Test parameter: 70 h, 100 °C |
| Value change 4 | Medium: ASTM Fuel A Hardness: +1 Points Tensile strength: -8 % Elongation at break: -8 % Volume: -2 % Test norm: ASTM D 471 Test parameter: 70 h, 23 °C |
| Value change 5 | Medium: ASTM Fuel B Hardness: -20 Points Tensile strength: -50 % Elongation at break: -50 % Volume: +30 % Test norm: ASTM D 471 Test parameter: 70 h, 23 °C |

Approvals of this compound

DVGW EN 549 B1 (0-80°C) H2



In compliance with RoHS and REACH directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.

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