



BS11 NBR

black | density 1.20 | hardness 50

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NITRILE 50 SHEETING: FOR TECHNICAL APPLICATIONS

FEATURES

High grade 50 Shore A nitrile.

ADVANTAGES

- ▶ Excellent oil and grease resistance (maximum temperature + 70 °C)
- ▶ Excellent hydrocarbons resistance (aromatics content less than 30 % and maximum temperature + 20 °C)
- ▶ Matte finish to guarantee a good surface finished quality, to secure an easy unrolling, and to facilitate adhesive bonding processes

BENEFITS

- ▶ Reliability
- ▶ Safety
- ▶ Performance

APPLICATIONS

Gaskets or washers cutting and manufacturing of pieces for general purpose applications in contact with mineral oils and hydrocarbons.

www.trelleborg.com/elastomerlaminates

MECHANICAL, PHYSICAL AND CHEMICAL PROPERTIES

| Measured characteristics | | Standard | Value | |
|---|-------------------------------------|---------------|------------------------------|-------------------|
| MECHANICAL | | | | |
| <i>Rubber compound</i> | | | NBR | |
| <i>Density</i> | | | 1.20 ± 0.05 | g/cm ³ |
| <i>Hardness</i> | | ASTM D2240 | 50 ± 5 | Shore A |
| <i>Tensile strength</i> | | ISO 37 | ≥ 8 | MPa |
| <i>Elongation at break</i> | | ISO 37 | ≥ 450 | % |
| <i>Tear resistance</i> | | ISO 34-1 | ≥ 30 | N/mm |
| <i>Compression set after 24 h at 70 °C</i> | | ISO 815-1 | ≤ 25 | % |
| TEMPERATURE | | | | |
| <i>Working temperature</i> | | | - 30/+ 70 | °C |
| AGEING | | | | |
| <i>Δ Hardness after 72 h at 100 °C</i> | | ASTM D573 | ≤ 7 | Shore A |
| <i>Δ Tensile strenght after 72 h at 100 °C</i> | | ASTM D573 | ≤ - 25 | % |
| <i>Δ Elongation at break after 72 h at 100 °C</i> | | ASTM D573 | ≤ - 55 | % |
| OIL RESISTANCE | | | | |
| <i>Oil IRM 901, Δ volume after 72 h at 100 °C</i> | | ASTM D471 | ≤ - 15 | % |
| <i>Oil IRM 903, Δ volume after 72 h at 100 °C</i> | | ASTM D471 | ≤ 30 | % |
| CHEMICAL RESISTANCE | | | | |
| <i>Diluted acids and bases</i> | <i>Concentrated acids and bases</i> | <i>Ozone</i> | <i>Oils and hydrocarbons</i> | |
| Very good | Good | Medium | Very good | |

DIMENSIONS

| Thickness (mm) | | Width (mm) | | Length (m) | | Weight (kg/m ²) | Pattern |
|----------------|-------|------------|-------|------------|-------|-----------------------------|---------------------------|
| 1 | ± 0.3 | 1400 | ± 2 % | 20 | ± 2 % | 1.20 | 2 sides matt |
| 2 | ± 0.3 | 1400 | ± 2 % | 15 | ± 2 % | 2.40 | 2 sides matt |
| 3 | ± 0.3 | 1400 | ± 2 % | 10 | ± 2 % | 3.60 | 2 sides matt |
| 4 | ± 0.4 | 1400 | ± 2 % | 10 | ± 2 % | 4.80 | 2 sides matt |
| 5 | ± 0.4 | 1400 | ± 2 % | 10 | ± 2 % | 6.00 | 1 side smooth/1 side matt |
| 6 | ± 0.5 | 1400 | ± 2 % | 10 | ± 2 % | 7.20 | 1 side smooth/1 side matt |

IDENTIFICATION

| | |
|------------------|---|
| <i>Branding</i> | Without. |
| <i>Packaging</i> | Thickness ≤ 6 mm rolled on cardboard tube Ø 80 mm. Thickness > 6 mm in roll. |
| <i>Wrapping</i> | Black polyethylene film. |
| <i>Labelling</i> | Self-adhesive label indicating product name, dimensions, area in m ² , nominal weight, and product code to allow product traceability. |