

# B571 NBR

white | density 1.44 | hardness 65

03/07/2014

## WHITE NITRILE SHEETING: FOOD QUALITY



### FEATURES

NBR, white, food grade, meeting regulation (EC) 1935/2004 (European legislation) and FDA classification (American legislation).

### REGULATIONS

- ▶ Meeting european regulations (EC) n° 1935/2004 and 2023/2006
- ▶ The material is in compliance with FDA 21 CFR Part. 177. Indirect Food Additives: Polymers. Sec 177.2600. Rubber articles intended for repeated use for contact with aqueous food and with fatty food
- ▶ Quality certificate available under request

### ADVANTAGES

- ▶ Very good oil, animal and vegetable fats resistance
- ▶ Good low temperature resistance
- ▶ Good high temperature resistance
- ▶ Good ratio quality/price

### BENEFITS

- ▶ Performance
- ▶ Legality
- ▶ Hygiene, cleanliness
- ▶ Food safety
- ▶ Economy

### APPLICATIONS

Gaskets or washers cutting and manufacturing of pieces for general purpose applications in contact with fatty food products, especially vegetable fats.

### MAINTENANCE RECOMMENDATION

Always follow manufacturer warnings and instructions when using any cleaning product.

[www.trelleborg.com/elastomerlaminates](http://www.trelleborg.com/elastomerlaminates)

## MECHANICAL, PHYSICAL AND CHEMICAL PROPERTIES

|                            | Measured characteristics                         | Standard                            | Value         |                              |
|----------------------------|--|-------------------------------------|---------------|------------------------------|
| <b>MECHANICAL</b>          |  |                                     |               |                              |
|                            | <i>Rubber compound</i>                           |                                     | NBR           |                              |
|                            | <i>Density</i>                                   |                                     | 1.44 ± 0.05   | g/cm <sup>3</sup>            |
|                            | <i>Hardness</i>                                  | ASTM D2240                          | 65 ± 5        | Shore A                      |
|                            | <i>Tensile strength</i>                          | ISO 37                              | ≥ 10          | MPa                          |
|                            | <i>Elongation at break</i>                       | ISO 37                              | ≥ 400         | %                            |
|                            | <i>Tear resistance</i>                           | ISO 34-1                            | ≥ 20          | N/mm                         |
|                            | <i>Compression set after 22 h at 70 °C</i>       | ISO 815-1                           | ≤ 30          | %                            |
| <b>TEMPERATURE</b>         |  |                                     |               |                              |
|                            | <i>Working temperature</i>                       |                                     | - 35/+ 110    | °C                           |
| <b>AGEING</b>              |  |                                     |               |                              |
|                            | <i>Δ Hardness after 70 h at 70 °C</i>            | ASTM D573                           | ≤ 5           | Shore A                      |
|                            | <i>Δ Tensile strenght after 70 h at 70 °C</i>    | ASTM D573                           | ≤ - 15        | %                            |
|                            | <i>Δ Elongation at break after 70 h at 70 °C</i> | ASTM D573                           | ≤ - 40        | %                            |
| <b>OIL RESISTANCE</b>      |  |                                     |               |                              |
|                            | <i>Oil IRM 901, Δ volume after 70 h at 70 °C</i> | ASTM D471                           | ≤ 5           | %                            |
|                            | <i>Oil IRM 903, Δ volume after 70 h at 70 °C</i> | ASTM D471                           | ≤ 25          | %                            |
| <b>CHEMICAL RESISTANCE</b> |  |                                     |               |                              |
|                            | <i>Diluted acids and bases</i>                   | <i>Concentrated acids and bases</i> | <i>Ozone</i>  | <i>Oils and hydrocarbons</i> |
|                            | <b>Very good</b>                                 | <b>Good</b>                         | <b>Medium</b> | <b>Very good</b>             |

## DIMENSIONS

| Thickness (mm) |       | Width (mm) |       | Length (m) |       | Weight (kg/m <sup>2</sup> ) | Pattern        |
|----------------|-------|------------|-------|------------|-------|-----------------------------|----------------|
| 1              | ± 0.3 | 1400       | ± 2 % | 20         | ± 2 % | 1.44                        | 2 smooth sides |
| 1.5            | ± 0.3 | 1400       | ± 2 % | 15         | ± 2 % | 2.16                        | 2 smooth sides |
| 2              | ± 0.3 | 1400       | ± 2 % | 15         | ± 2 % | 2.88                        | 2 smooth sides |
| 3              | ± 0.3 | 1400       | ± 2 % | 10         | ± 2 % | 4.32                        | 2 smooth sides |
| 4              | ± 0.4 | 1400       | ± 2 % | 10         | ± 2 % | 5.76                        | 2 smooth sides |
| 5              | ± 0.4 | 1400       | ± 2 % | 10         | ± 2 % | 7.20                        | 2 smooth sides |
| 6              | ± 0.5 | 1400       | ± 2 % | 10         | ± 2 % | 8.64                        | 2 smooth sides |
| 8              | ± 0.7 | 1400       | ± 2 % | 5          | ± 2 % | 11.52                       | 2 smooth sides |
| 10             | ± 1.0 | 1400       | ± 2 % | 5          | ± 2 % | 14.40                       | 2 smooth sides |

## IDENTIFICATION

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