

# R490 NR

16/07/2014



## NR SHEETING: HIGH PERFORMANCE

### FEATURES

Natural rubber, para quality, translucent, with excellent mechanical properties.

### ADVANTAGES

- Very good mechanical properties (tensile strength, tear resistance, etc.) and at the same time, easy material to work with
- Good properties to support high mechanical strains
- Great elasticity allowing important deformations
- Resistance to fine grained particles wear projection (sand, blasting)
- Good electrical properties
- Good resistance to acids, bases and salts
- Good ratio quality/price

### BENEFITS

- Functionality
- Comfort
- Service life
- Economy

### APPLICATIONS

Gaskets or washers cutting and manufacturing of pieces for general purpose applications in contact with:

- maximum temperature 50 °C: water, water washing, alkaline and salt solutions, acids and oxidizing non oxidizing, alkali base concentration ≤ 50 %, non food alcohol
- maximum temperature 20 °C: acetones

Cutting into skirtboard and scrappers for conveyors belts, rubber sleeves, etc.

Mineral processing equipment linings, such as operating cyclones, hydrocyclones and sand treatment processes.

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

## MECHANICAL, PHYSICAL AND CHEMICAL PROPERTIES

|                            | Measured characteristics                         | Standard                            | Value         |   |
|----------------------------|--|-------------------------------------|---------------|---|
| <b>MECHANICAL</b>          |  |                                     |               |   |
|                            | <i>Rubber compound - beige</i>                   |                                     | NR            |  |
|                            | <i>Density</i>                                   |                                     | 1.05 ± 0.05   | g/cm <sup>3</sup>   |
|                            | <i>Hardness</i>                                  | ASTM D2240                          | 45 ± 5        | Shore A   |
|                            | <i>Tensile strength</i>                          | ISO 37                              | ≥ 16          | MPa   |
|                            | <i>Elongation at break</i>                       | ISO 37                              | ≥ 600         | %   |
|                            | <i>Tear resistance</i>                           | ISO 34-1                            | ≥ 25          | N/mm  |
|                            | <i>Abrasion resistance (5 N)</i>                 | ISO 4649                            | ≤ 85          | mm <sup>3</sup>   |
|                            | <i>Compression set after 22 h at 70 °C</i>       | ISO 815-1                           | ≤ 30          | %   |
| <b>TEMPERATURE</b>         |  |                                     |               |   |
|                            | <i>Working temperature</i>                       |                                     | - 40/+ 85     | °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                           | ≤ - 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>Non suitable</b>   |

## DIMENSIONS

|     | Thickness<br>(mm) | Width<br>(mm) | Length<br>(m) | Weight<br>(kg/m <sup>2</sup> ) | Sides finish   |
|-----|-------------------|---------------|---------------|--------------------------------|----------------|
| 1   | ± 0.3             | 1400 ± 2 %    | 20 ± 2 %      | 1.05                           | 2 smooth sides |
| 1.5 | ± 0.3             | 1400 ± 2 %    | 15 ± 2 %      | 1.58                           | 2 smooth sides |
| 2   | ± 0.3             | 1400 ± 2 %    | 15 ± 2 %      | 2.10                           | 2 smooth sides |
| 3   | ± 0.3             | 1400 ± 2 %    | 10 ± 2 %      | 3.15                           | 2 smooth sides |
| 4   | ± 0.4             | 1400 ± 2 %    | 10 ± 2 %      | 4.20                           | 2 smooth sides |
| 5   | ± 0.4             | 1400 ± 2 %    | 10 ± 2 %      | 5.25                           | 2 smooth sides |
| 6   | ± 0.5             | 1400 ± 2 %    | 10 ± 2 %      | 6.30                           | 2 smooth sides |
| 8   | ± 0.7             | 1400 ± 2 %    | 5 ± 2 %       | 8.40                           | 2 smooth sides |
| 10  | ± 1.0             | 1400 ± 2 %    | 5 ± 2 %       | 10.50                          | 2 smooth sides |
| 12  | ± 1.0             | 1400 ± 2 %    | 5 ± 2 %       | 12.60                          | 2 smooth sides |
| 15  | ± 1.0             | 1400 ± 2 %    | 5 ± 2 %       | 15.75                          | 2 smooth sides |
| 20  | ± 1.4             | 1400 ± 2 %    | 5 ± 2 %       | 21.00                          | 2 smooth sides |
| 25  | ± 1.75            | 1400 ± 2 %    | 5 ± 2 %       | 26.25                          | 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>  | Black 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. |