

# BRI

Ultrathin display shrinkfilm on the basis of bi-oriented polyethylene (BO-PE) and recycled raw material

- Versatility
- High cohesion strength
- Extremely thin, thus contributing to resource savings
- Recyclable
- Perfectly adapted for the packaging of industrial and consumer goods



## Disposal

Options for disposal are **recycling** (compatible with SPI code 4/PE-LD), incineration with energy recovery and landfill. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial and local regulations.

## Food contact

Complies with EU and US regulations on food contact materials.

See the « Declaration of Conformity » of concerned film reference for details.

## Film storage

The maximum temperature for storage is 32° C, with a maximum of 80% RH, up to one year.

BRI

Technical Specifications

| Technical properties                  | Test unit                 | Test Method                                | Values |        |        |        |       |       |       |       |
|---------------------------------------|---------------------------|--------------------------------------------|--------|--------|--------|--------|-------|-------|-------|-------|
| Reference                             |                           |                                            | BRI 13 | BRI 15 | BRI 19 | BRI 25 |       |       |       |       |
| Presentation                          |                           |                                            |        |        |        |        |       |       |       |       |
| Grade                                 |                           |                                            | 13     | 15     | 19     | 25     |       |       |       |       |
| Roll Length - singlewound (S)         | m                         |                                            | 3 100  | 2 670  | 2 140  | 1 600  |       |       |       |       |
| Roll Length - centerfolded (C )       | m                         |                                            | 1 550  | 1 335  | 1 070  | 800    |       |       |       |       |
| Width - singlewound (S)               | mm                        | mini : 150 - maxi : 1 400 - increment : 5  |        |        |        |        |       |       |       |       |
| Width - centerfolded (C )             | mm                        | mini : 150 - maxi : 1 000 - increment : 50 |        |        |        |        |       |       |       |       |
| Friction coefficients ( film to film) |                           |                                            |        |        |        |        |       |       |       |       |
| Static                                |                           | ASTM D1894                                 | 0.37   | 0.37   | 0.37   | 0.32   |       |       |       |       |
| Dynamic                               |                           | ASTM D1894                                 | 0.18   | 0.18   | 0.18   | 0.16   |       |       |       |       |
| Optical properties                    |                           |                                            |        |        |        |        |       |       |       |       |
| Haze                                  | %                         | ASTM D1003-A                               | 5      | 5      | 5      | 5      |       |       |       |       |
| Gloss at 20°                          |                           | ASTM D2457                                 | 90     | 87     | 87     | 87     |       |       |       |       |
| Shrinkage properties                  |                           |                                            | LD*    | TD*    | LD*    | TD*    | LD*   | TD*   | LD*   | TD*   |
| Free shrink at 93°                    | %                         | ASTM D2732                                 | 17     | 17     | 16     | 22     | 15    | 21    | 13    | 20    |
| Free shrink at 120°                   | %                         | ASTM D2732                                 | 59     | 58     | 60     | 60     | 58    | 61    | 50    | 50    |
| Shrink force                          | kg/cm²                    | NFT 54-125                                 | 27     | 28     | 30     | 31     | 29    | 31    | 24    | 35    |
| Mechanical properties                 |                           |                                            | LD*    | TD*    | LD*    | TD*    | LD*   | TD*   | LD*   | TD*   |
| Stiffness modulus                     | Mpa                       | ASTM D882                                  | 650    | 750    | 700    | 750    | 700   | 750   | 700   | 750   |
| Elongation at break                   | %                         | ASTM D882                                  | 67     | 90     | 85     | 100    | 100   | 100   | 100   | 100   |
| Tensile strength                      | Kg/cm²                    | ASTM D882                                  | 1 000  | 1 000  | 1 000  | 1 100  | 1 100 | 1 100 | 1 100 | 1 100 |
| Barrier properties                    |                           |                                            |        |        |        |        |       |       |       |       |
| Water vapour transmission rate        | g/m²/24h<br>38°C, 95% RH  | ASTM E96                                   | 21     |        | 19     |        | 16    |       | 12    |       |
| Oxygen transmission rate              | cm³/m²/24h<br>23°C, 0% RH | ASTM D3985                                 | 9 400  |        | 8 000  |        | 7 100 |       | 5 400 |       |

\* LD = Longitudinal Direction  
\* TD = Transversal Direction

Pre-perforation is standard on the centerfolded version (BRI HC).



The technical features of the products defined herein are given as typical values. They are the best information available to us and we believe them to be reliable. Users have to check-up that they are suitable with all the applications as performance may vary with processing conditions. Unless previous warning, BOLLORÉ has the right to change at any time the definition and technical features of its products.

