



# PETWIST

## BT 1031 MBY

### Description

PETWIST BT 1031 MBY is a metallized, twistable, BOPET film with excellent shiny metallic appearance and barrier properties. Non heat sealable. Metallized side is treated to give excellent adhesion to wide range of inks.

It is specially designed to have improved twistability for food and non-food packaging applications such as candy, sugar bars etc. Excellent machinability characteristics for high speed twist packagings with flow pack processing. Suitability for pouch type packaging should be approved at actual processes before using on long runs.

Please be informed that non-treated side also has a kind of affinity and film should be treated as both sides treated. So it is advised to take care about possible blocking tendency during printing and further processings.

It is only suitable for single web surface print applications. Priming onto metal surface for adequate ink adhesion is highly recommended.

Lacquering with antistatic property onto print surface is recommended for smooth running at high speeds if the print coverage is high

### Properties

- Excellent twistability for different packaging processes
- Excellent high-speed machinability
- High impact and tear resistance
- Excellent metal adhesion
- Excellent shiny metallic appearance
- Attractive graphic design capability
- Excellent chemical resistance
- Excellent ink, coating and adhesive adhesion

## Technical Features

| PROPERTIES                                     | TEST METHOD    | UNITS                        | BT 1031 MBY        |        |
|--|----------------|------------------------------|--------------------|--------|
| THICKNESS                                      | ASTM F 2251    | micron                       | 18                 | 23     |
|  |                | Gauge                        | 72                 | 92     |
| YIELD  | ASTM D 4321    | m <sup>2</sup> /kg           | 39,7               | 31,1   |
|  |                | in <sup>2</sup> /Lbs         | 27.900             | 21.800 |
| UNIT WEIGHT                                    | ASTM D 4321    | g/m <sup>2</sup>             | 25,2               | 32,2   |
| OXYGEN TRANSMISSION RATE<br>(23°C-0%RH)        | ASTM D 3985    | cc/m <sup>2</sup> /24hrs     | < 4                |        |
|  |                | cc/100in <sup>2</sup> /24hrs | < 0,26             |        |
| WATER VAPOUR TRANSMISSION RATE<br>(38°C-90%RH) | ASTM F 1249    | g/m <sup>2</sup> /24hrs      | < 0,4              |        |
|  |                | g/100in <sup>2</sup> /24hrs  | < 0,026            |        |
| TENSILE STRENGTH AT BREAK                      | ASTM D 882     | MD                           | N/mm <sup>2</sup>  | 260    |
|  |                |                              | lb/in <sup>2</sup> | 37.700 |
|  |                | TD                           | N/mm <sup>2</sup>  | 280    |
|  |                |                              | lb/in <sup>2</sup> | 40.600 |
| ELONGATION AT BREAK                            | ASTM D 882     | MD                           | %                  | 140    |
|  |                |                              |                    | TD     |
| COEFFICIENT OF FRICTION                        | ASTM D 1894    | Film/Film<br>(Dynamic)       | 0,40               |        |
| SURFACE TENSION                                | ASTM D 2578    | Dyne/cm                      | Metal Side         | 56     |
|  |                |                              | Other Side         | -      |
| OPTICAL DENSITY                                | MACBETH TD 931 | -                            | 2,2                |        |

### Product Identification (Decision 97/129/EC): PET1

Metallization is a special process and aluminium coated surface is very sensitive to environmental conditions. Even though metal surface tension is above 40 dynes after production, it tends to decrease within time influencing by climatic conditions and storage periods. A guarantee of the duration of surface tension of metallized surface can not be given. We recommend to store metallized films in a dry place and at temperatures below 30°C. It is also advised to use metallized films as 'First in, First Out' principle. In-line treatment and/or priming onto metal surface for adequate ink or coating adhesion is strongly recommended. The metallized surface can normally be laminated with most of the substrates. Other properties of the metallized films are guaranteed for 6 months from the date of production.

The information contained in this data sheet is true and accurate according to current state of our knowledge and intended to give general information on our products and their applications. Above values are to be considered as guidelines and not as product specifications. Since the actual conditions of use are beyond our control, users are advised to make their own tests at their specific conditions of laboratory and/or actual use. We suggest our customers to determine final suitability for their specific end uses.

Also be advised that information on this data sheet shall not be construed as an inducement or recommendation to use any process or to manufacture or use any product in conflict with existing, pending or future patents.

For related spec sheet with tolerance values, please contact our sales departments

| STANDARD ROLL DIMENSIONS     |                          |                     |                 |
|------------------------------|--------------------------|---------------------|-----------------|
| CORE INNER DIAMETER (ID)     | CORE OUTER DIAMETER (OD) | LENGTH TOLERANCE    | WIDTH TOLERANCE |
| 76 mm (3 in) & 152 mm (6 in) | 530 mm & 790 mm *        | ± % 10 for all OD's | - 0 & + 4 mm    |

\* 790 mm OD is available for BOPET films above 400 mm width