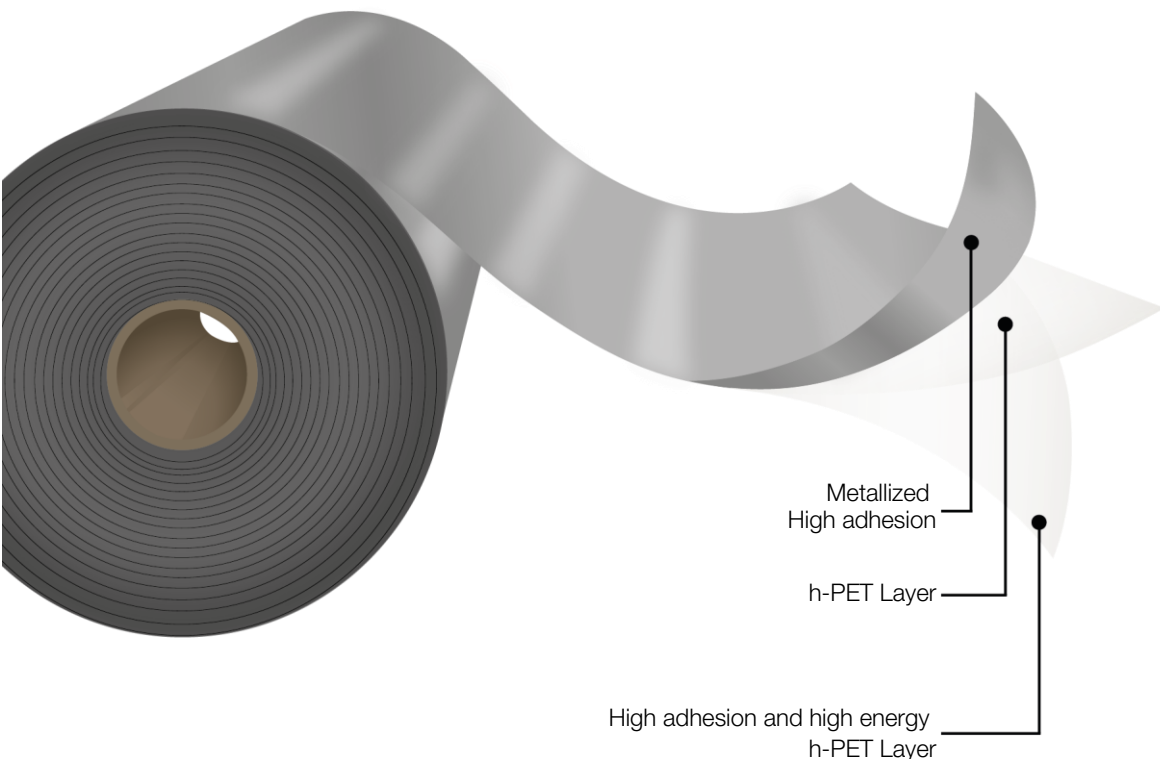


# Terphane® Metal

EMq - MF

Ref: SHX



*Metallized BOPET film, high-barrier and high-adhesion metallization, copolyester with high adhesion and high surface energy on one side*

## Description

Biaxially oriented polyester film with high-adhesion and high-energy treatment on one side, high-barrier metallized on the reverse side through a controlled vacuum deposition process using high-purity aluminum. The base resin is PET homopolymer. The aluminum layer is located on the outer side of the reel. The high-adhesion, high-energy treatment is located on the inner side of the reel.

## Main Characteristics

- High barrier properties against moisture, oxygen, and light.
- Excellent adhesion to metal, adhesives, and inks.
- Excellent thermal resistance.
- Excellent flatness and dimensional stability.

## Applications

Designed for use in various conversion processes in the food packaging industry, as well as in other industrial applications. The acrylic treatment allows strong anchorage of inks (rotogravure, flexography, UV-curable offset), adhesives, and varnishes. It is specifically designed for lamination structures with paperboard (folding cartons) such as cosmetic boxes, beverages, chocolates, etc. Complies with FDA and EU regulations for food contact.

### \* Important Considerations

\* It is recommended to store this material at conditions not exceeding 30°C, in a place without exposure to sunlight and with a relative humidity of 60%. To protect against humidity and avoid film blocking, rolls should stay covered with plastic overwrap when not in use.

\* The information in this data sheet is based on tests carried out in our laboratories and is intended to be used for reference only, and does not constitute a specification. Therefore, should not be construed as a guarantee of performance. It is the responsibility of the user to carry out the necessary tests to guarantee its use for the intended applications.

\* This product complies with FDA and EU regulations. For more information, please visit our website: <https://www.obengroup.com/en/doc-regulatorios/>

Standard  
Dimensions \*

\*For specific lot sizes,  
widths, or outer  
diameters. Please,  
contact your sales  
representative.

| Film Code | Thickness<br>(mils) | Yield<br>(in <sup>2</sup> /lb) | Width (in) | Core<br>Size | 30" Φ Outside Diam. |                | Treatment                   |
|-----------|---------------------|--------------------------------|------------|--------------|---------------------|----------------|-----------------------------|
|           |                     |                                |            |              | Length (ft)         | Weight (lb/in) |                             |
| EMq 12 MF | 0.47                | 42,100                         | 15 to 80   | 6"           | 118,800             | 33.87          | Metal Out./ High energy In. |

Typical Values  
of Physical  
Properties \*\*

\*\*Information and data  
presented in this data sheet  
is intended to be used as  
general guidelines.Physical  
properties specifications are  
available upon request.

| Property                                            |     | Unit              | Testing Method   | Thickness in Mils |
|-----------------------------------------------------|-----|-------------------|------------------|-------------------|
|                                                     |     |                   |                  | 0.47              |
| Optical Density                                     | -   | -                 | AIMCAL TP 101-78 | 2.2               |
| Metal Adhesion (220 °F, 15 Psi)                     | M   | g/in              | AIMCAL TP105     | 1000              |
| Coefficient of Friction - Kinetic                   | F/F | -                 | ASTM D1894       | 0.50              |
| Tensile Strength                                    | DM  | lb/in²            | ASTM D882        | 32,000            |
|                                                     | DT  |                   |                  | 37,800            |
| Elongation at Break                                 | DM  | %                 |                  | 125               |
|                                                     | DT  |                   |                  | 100               |
| Secant Modulus 2%                                   | DM  | lb/in²            |                  | 565,700           |
|                                                     | DT  |                   |                  | 609,200           |
| Surface Tension                                     | F   | dyn/cm            | ASTM D2578       | 56                |
| Water Vapor Transmission Rate (100.4 °F, 90 % R.H.) | -   | g/(100 in².day)   | ASTM F1249       | 0.06              |
| Oxygen Transmission Rate (73.4°F, 0 % RH)           |     | cm³/(100 in².day) | ASTM D3985       | 0.06              |

