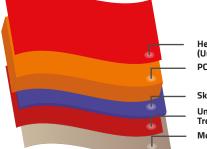


### FLEXMETPROTECT<sup>™</sup> ASCLEPIUS<sup>™</sup> R-HSP-M TECHNICAL DATA SHEET

(BIAXIALLY ORIENTED METALLIZED POLYESTER FILM)

# **R-HSP-M** METALLIZED PCR BASED HEAT-SEAL FILMS

R-HSP-M is co-extruded transparent Heat-Sealable BOPET film from our Asclepius branded PCR content products. The film has a Heat-Sealable Functional layer on one side with the other side being metallized. The film is available with an optical density of 2.2. The metallization is available on the Untreated surface (MU) or Corona Treated surface (MT) as specified by the customer. The bond between the metal & film is a minimum of 100gm/25mm when metallized on the Untreated surface & a minimum of 130gm/25mm when metallized on the Corona Treated surface. This Data Sheet applies to all PCR content levels (30, 50, 90, and 100%).



**FILM STRUCTURE** 

Heat Sealable Layer (Untreated) PCR Core Layer

Skin Layer Untreated / Corona Treatment Metallized Layer

# **KEY FEATURES:**

- Good barrier properties
- Post Consumer Recycle content for low carbon footprint
  (all % PCR)
- Excellent machinability & handling properties
- Good metal bond properties

# **APPLICATION:**

- Tack Seal application
- Food tray sealing
- Decorative applications
- Printing & Lamination

| PROPERTIES                               |             | TEST METHOD | UNIT               | TYPICAL VALUES                |   |  |
|--|-------------|-------------|--------------------|-------------------------------|---|--|
| OPTICAL DENSITY<br>(TOLERANCE: +/- 5%)   |             |             |                    | Standard Density (SD) 2.2 - I | Standard Density (SD) 2.2 - Barrier Packaging Application |  |
| THICKNESS                                |             | Internal    | Micron             | 12                            | 15  |  |
|  |             |             | (Gauge)            | 48                            | 60  |  |
| YIELD                                    |             | Internal    | m² / kg            | 59.52                         | 47.62   |  |
|  |             |             | in² /lb            | 41934                         | 33550   |  |
| COF (max)<br>One side to the other side  |             | ASTM D-1894 | -                  | 0.70                          |   |  |
| TENSILE STRENGTH<br>AT BREAK (min)       | MD          | ASTM D-882  | kg/cm <sup>2</sup> | 1700                          | 1700  |  |
|  | TD          |             |                    | 1900                          | 1900  |  |
|  | MD          |             | (Psi) -            | 24200                         | 24200   |  |
|  | TD          |             |                    | 27000                         | 1900  |  |
| ELONGATION AT BREAK<br>(min)             | MD          | ASTM D-882  | % -                | 105                           | 110   |  |
|  | TD          |             |                    | 85                            | 85  |  |
| LINEAR SHRINKAGE (max)                   | MD          | ASTM D-1204 | %                  | 1.5                           |   |  |
| (30 Minute at 105°C)                     | TD          | AJ1WLD-1204 |                    | 0.6                           |   |  |
| HEAT SEAL TEMP. RANGE                    |             | Internal    | °C                 | 110-200                       | 110-200   |  |
| SEAL STRENGTH<br>(120°C, 1 sec, 2.8 bar) | FIN<br>SEAL | ASTM D-882  | gm/25mm            | 400                           | 500   |  |
| MVTR (38º C & 90% RH) (typical)          |             | ASTM F-1249 |                    | SD                            |   |  |
|  |             |             | gm/m²/day          | 1.0                           |   |  |
|  |             |             | (gm/100 in²/day)   | 0.06                          |   |  |
| OTR (23°C & 0% RH) (typical)             |             | ASTM D-3985 | cc/m²/day          | 1.1                           |   |  |
|  |             |             | (cc/100 in²/day)   | 0.07                          |   |  |

★ This dyne value is applicable only for NAFTA, SA, and Poland manufacturing plants.

# The inherent surface tension of the untreated side of any PET film is a minimum of 42 dyne/cm.

### **STORAGE & HANDLING**

FLEXMETPROTECT<sup>™</sup> needs to be stored in a warehouse below 35°C (95°F) and should not be exposed to direct sunlight, bright light sources, or high humidity. If the material is stored in the recommended conditions, FLEXMETPROTECT<sup>™</sup> is suitable for use within 180 days from the date of shipment.

#### **FOOD CONTACT**

FLEXMETPROTECT<sup>TM</sup> complies with EU and FDA regulations on plastic materials used for food grade application. Specific documents and SDS are available on request.

### DISCLAIMER

It is the responsibility of our customer to determine that their use of our products is safe, lawful, and technically suitable in their intended applications. The technical data sheets are provided for discussion purposes only. The customer may not rely on the data provided for any manufacturing purpose. The values provided in the technical data sheet represent typical values based on the best of our knowledge as of the date when the data was compiled. The data is offered solely to provide possible suggestions for your own experimentation and not as a guarantee for the material supplied. The user is solely responsible for the end use of the product and needs to perform their own tests to confirm the product suitability/compatibility in all respects. Flex provides no warranty and accepts no liability for any loss or fitness of the product for any specific purpose based on the technical data sheets. Flex reserves the right to change the technical data sheet at any time without prior notice.

## FlexFilms

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