

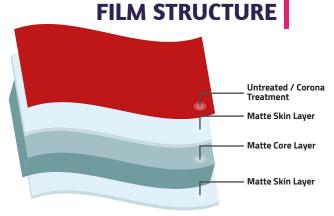
FLEXPET <sup>™</sup> F-MAT TECHNICAL DATA SHEET BIAXIALLY ORIENTED POLYESTER FILM

# **F-MAT** MATTE FILM

F-MAT is a matte effect BOPET film. The film is either both sides Untreated or one side Untreated with the other side being Corona Treated.

### **KEY FEATURES:**

- Excellent matte effect
- Corona Treatment improves bonding
- Excellent machinability & handling properties
- Good stiffness



### **APPLICATION:**

- Thermal Lamination
- Label Application
- Conversion Application
- Board Lamination

| PROPERTIES   |    | TEST METHOD | UNIT             | TYPICAL VALUES |       |       |       |
|--|----|-------------|------------------|----------------|-------|-------|-------|
| THICKNESS  |    | Internal    | Micron           | 12             | 15    | 19    | 23    |
|  |    |             | (Gauge)          | 48             | 60    | 76    | 92    |
| YIELD  |    | Internal    | m² / kg          | 59.52          | 47.62 | 37.59 | 31.05 |
|  |    |             | in² /lb          | 41934          | 33548 | 26483 | 21876 |
| SURFACE TENSION (min) #<br>(Corona Treated Surface)                    |    | ASTM D-2578 | dyne/cm          | 52             |       |       |       |
| COF (max)<br>(Untreated to Untreated)<br>(Untreated to Corona Treated) |    | ASTM D-1894 |                  | 0.45           | 0.45  | 0.45  | 0.45  |
|  |    |             |                  | 0.50           | 0.50  | 0.50  | 0.50  |
| HAZE (min)   |    | ASTM D-1003 | %                | 40             | 40    | 45    | 45    |
| TENSILE STRENGTH<br>AT BREAK (min)                                     | MD | ASTM D-882  | kg/cm²           | 1700           | 1700  | 1700  | 1600  |
|  | TD |             |                  | 2000           | 2000  | 2000  | 2000  |
|  | MD |             | (Psi)            | 24200          | 24200 | 24200 | 22700 |
|  | TD |             |                  | 28500          | 28500 | 28500 | 28500 |
| ELONGATION AT BREAK<br>(min)   | MD | ASTM D-882  | %                | 110            | 110   | 120   | 130   |
|  | TD |             |                  | 75             | 75    | 80    | 85    |
| LINEAR SHRINKAGE (max)<br>(30 Minute at 150°C)                         | MD | ASTM D-1204 | %                | 3.0            |       |       |       |
|  | TD |             |                  | 1.0            |       |       |       |
| MVTR (38º C & 90% RH) (typical)  |    | ASTM F-1249 | gm/m²/day        | 45             | 40    | 35    | 30    |
|  |    |             | (gm/100 in²/day) | 2.9            | 2.6   | 2.3   | 2.0   |
| OTR (23°C & 0% RH) (typical)   |    | ASTM D-3985 | cc/m²/day        | 130            | 110   | 90    | 80    |
|  |    |             | (cc/100 in²/day) | 8.5            | 7.1   | 5.8   | 5.2   |

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

#### **STORAGE & HANDLING**

FLEXPET<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, FLEXPET<sup>™</sup> is suitable for use within 270 days from the date of shipment.

#### FOOD CONTACT

FLEXPET<sup>™</sup> complies with EU and FDA regulations on plastic materials used for food grade applications. 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 information contained in 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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