

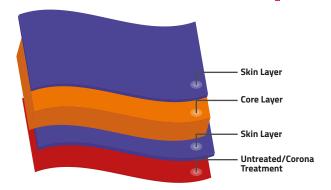
# F-ELE ELECTRICAL INSULATION FILM

F-ELE is a transparent BOPET film. The film is one side Corona Treated with one side Untreated or both sides Untreated.

# **KEY FEATURES:**

- Excellent dielectrical properties
- High break down voltage
- Excellent machinability & handling properties
- High electrical receptivity

# FILM STRUCTURE



# **APPLICATION:**

- Electrical insulation
- Motor winding & cable over wrap
- Leatheroid Lamination
- Electrical insulation tape

| PROPERTIES   | TEST METHOD    | UNIT             | TYPICAL VALUES |       |       |       |       |       |       |
|--|----------------|------------------|----------------|-------|-------|-------|-------|-------|-------|
| THICKNESS  | Internal       | Micron           | 8              | 12    | 15    | 19    | 23    | 36    | 50    |
| THICKINESS   | internal       | (Gauge)          | 32             | 48    | 60    | 76    | 92    | 144   | 200   |
| YEILD  | Internal       | m² / kg          | 89.28          | 59.52 | 47.62 | 37.59 | 31.05 | 19.84 | 14.28 |
| TELED  | memai          | in² /lb          | 62901          | 41934 | 33550 | 26483 | 21876 | 13978 | 10060 |
| SURFACE TENSION (min) #<br>(Corona Treated surface)  | ASTM D-2578    | dyne/cm          | 52             |       |       |       |       |       |       |
| COF (max)<br>(One side to the other)                 | ASTM D-1894    | -                | 0.50           | 0.50  | 0.50  | 0.50  | 0.50  | 0.45  | 0.45  |
| HAZE (min)   | ASTM D-1003    | %                | 3.5            | 3.5   | 4.0   | 4.5   | 5.0   | 7.0   | 9.0   |
| TENSILE STRENGTH AT BREAK (min)                      | D*             | kg/cm²           | 1900           | 1900  | 1900  | 1900  | 1900  | 1750  | 1750  |
|  | D* ASTM D-882  |                  | 2000           | 2000  | 2000  | 2000  | 2000  | 2000  | 2000  |
|  |                | (Psi)            | 27000          | 27000 | 27000 | 27000 | 27000 | 25000 | 25000 |
|  | .D             |                  | 28500          | 28500 | 28500 | 28500 | 28500 | 28500 | 28500 |
| ELONGATION AT BREAK (min) TI                         | ASTM D-882     | %                | 90             | 105   | 105   | 110   | 115   | 120   | 125   |
|  |                |                  | 80             | 85    | 85    | 85    | 90    | 90    | 95    |
| LINEAR SHRINKAGE (max) MD<br>(30 Minute at 150°C) TD | 1D ASTM D-1204 | %                | 3.0            |       |       |       |       |       |       |
|  |                |                  | 1.0            |       |       |       |       |       |       |
| MVTR (38° C & 90% RH) (typical)                      | ASTM F-1249    | gm/m²/day        | 50             | 45    | 40    | 35    | 30    | 20    | 16    |
| With the Co Solo Kill (cypical)                      |                | (gm/100 in²/day) | 3.2            | 2.9   | 2.6   | 2.3   | 2.0   | 1.3   | 1.0   |
| OTR (23°C & 0% RH) (typical)                         | ASTM D-3985    | cc/m²/day        | 155            | 130   | 110   | 90    | 80    | 70    | 45    |
| o(25 c & o.o. iii i, (cypical)                       |                | (cc/100 in²/day) | 10.1           | 8.5   | 7.1   | 5.8   | 5.2   | 4.5   | 2.9   |

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

### **STORAGE & HANDLING**

SELEXIBLE 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, SELEXIBLE is suitable for use within 270 days from the date of shipment.

#### **FOOD CONTACT**

SELEXIBLE complies with EU and FDA regulations on plastic materials used for food grade applications. Specific documents and SDS are available on request.

#### DISCLAIMER

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