# **MSI255ESPL-CR**

METALLISED HEAT SEALABLE INSIDE METALLISED HIGH BARRIER GRADE BOPP FILM WITH CONTROLLED HEAT SEAL RANGE FOR EXTRUSION LAMINATION & PACKAGING CONVERSION



#### **DESCRIPTION**

MSI255ESPL-CR is Crack resistance high barrier metallised BOPP film. It is metallised on one side and heat sealable on other side having good moisture and gas barrier properties. It is lap sealable when laminated with other co-ex. Its untreated surface is specially designed for controlled heat seal range due to its slip controlled broad seal surface. This film is specially designed for Extrusion lamination.

#### **PRODUCT FEATURES**

- Crack resistance free metallised surface
- Excellent metal adhesion and treatment retention
- Suitable for Adhesive & Extrusion lamination process
- Good sealing properties
- Excellent runnability on HFFS and VFFS machines
- Good Moisture & Oxygen barrier
- Brilliant metal appearance
- Good stiffness and mechanical properties

#### **APPLICATIONS**

Typically used as an inner web in laminates for VFFS & HFFS applications;

- Confectionary (Chocolate/ Gum/ Sugar)
- Ice cream & Frozen food
- Bakery (Biscuits/cookie/crackers)
- Chips and Snacks
- Dry food and powder

### **NOMENCLATURE**

MSI255ESPL-CR

- Metallised surface is Inside & Heat seal surface is Outside
- MSO255ESPL-CR Metallised surface is
- Metallised surface is Outside & Heat seal surface is Inside

## **TOPPAN**

#### **PROVISIONAL**

| $\vdash$            |            | PROPERTIES                                  | REF.       | 15                         | 17                         | 18                         | 20                         | 25                         | UNITS                       | TEST<br>METHOD   |
|---------------------|------------|---|------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|--|
| SHEE                | GENERAL    | Thickness Density GSM Yield                 | -          | 15<br>0.91<br>13.7<br>73.3 | 17<br>0.91<br>15.5<br>64.6 | 18<br>0.91<br>16.4<br>61.1 | 20<br>0.91<br>18.2<br>54.9 | 25<br>0.91<br>22.8<br>44.0 | μ<br>g/cc<br>gm/m²<br>m²/kg | Internal Method<br>Internal Method<br>Internal Method<br>Internal Method |
| ATA                 | OPTICAL    | Optical Density                             | -          |                            |                            | 2.5                        |                            |                            | -                           | Internal Method  |
| AL D                | SURFACE    | Metal Adhesion<br>COF (Dynamic)             | -<br>UT/UT |                            |                            | 100<br>0.30                |                            |                            | %<br>-                      | Internal Method<br>ASTM D 1894   |
| TECHNICAL DATA SHEE | MECHANICAL | Tensile Strength<br>(at break)              | MD<br>TD   |                            |                            | 1300<br>2700               |                            |                            | Kg/cm²                      | ASTM D 882   |
|                     |            | Elongation<br>(at break)                    | MD<br>TD   |                            |                            | 200<br>70                  |                            |                            | %                           | ASTM D 882   |
|                     |            | Modulus                                     | MD<br>TD   |                            |                            | 18000<br>28000             |                            |                            | Kg/cm <sup>2</sup>          | ASTM D 882   |
|                     | THERMAL    | Thermal Shrinkage                           | MD<br>TD   |                            |                            | 4 2                        |                            |                            | %                           | ASTM D 1204  |
|                     |            | Heat seal range                             | -          |                            |                            | 105 - 14                   | 5                          |                            | °C                          | Internal Method  |
|                     |            | Heat Seal Strength<br>(1.0sec, 170N, 130°C) | -          |                            |                            | 350                        |                            |                            | g/25mm                      | Internal Method  |
|                     | ER         | WVTR (38°C, 90%rh)                          |            |                            |                            | 0.40                       |                            |                            | gm/m²/d                     | ASTM F 1249  |
|                     | ARRIER     | OTR (23°C, 0%rh)                            |            |                            |                            | 80                         |                            |                            | cc/m²/d                     | ASTM D 3985  |

The figures and above properties refer to typical values which are indicative only. Customers should verify the suitability of the film for its specific end use. Therefore this document will not represent a product specification.

#### **GUIDELINES FOR STORAGE**

Temperature should preferably be less than 30°C & humidity 55±5% in storage areas and material should be consumed within three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use.

#### **FOOD CONTACT**

OPP films complies with the requirements of FDA, EC & REACH regulations. Specific documentation is available on request.'

#### SAFETY

Compliance with industrial health and safety standards. OPP films do not present any significant danger to health and safety in the workplace, provided they are used for the intended purpose in accordance with conventional practices and that health & safety regulations are observed. Relevant guidelines can be found in our MSDS (available upon request).

#### **CAUTIONS**

- · Film characteristics are maintained for six months from the date of invoicing except for metallized layer surface tension
- Strongly recommend online corona treatment in metallized films during lamination as treatment level decay with time is a natural
  phenomenon which depends on ambient conditions (Recommended storage conditions: Temperature < 30 °C & Humidity 55%
  (Maximum) in original packed condition)</li>

#### TOPPAN SPECIALITY FILMS