

## POKETONE® E700

### Description

Barrier film grade for EVOH Blend

### Physical Properties

|                                        | ASTM     | Value                  | ISO   | Value                  |
|----------------------------------------|----------|------------------------|-------|------------------------|
| Density                                | D792     | 1.18 g/cm <sup>3</sup> | 1183  | 1.18 g/cm <sup>3</sup> |
| Shore D hardness                       | D2240    |                        | 868   |                        |
| Hardness Rockwell                      | D785     |                        | 2039  |                        |
| Water absorption equilibrium at RH 50% | D570     |                        | 62    |                        |
| Water absorption at Saturation         | D570     |                        | 62    |                        |
| Melt flow index 220°C/2.16kg           | D1238    | 6 g/10 min             | 1133  |                        |
|                                        | D955     |                        | 294-4 |                        |
| Mold Shrinkage                         | MD, 3 mm |                        |       |                        |
|                                        | TD, 3 mm |                        |       |                        |
|                                        | MD, 2 mm |                        |       |                        |
|                                        | TD, 2 mm |                        |       |                        |

### Mechanical Properties

|                                  | ASTM  | Value   | ISO     | Value                |
|----------------------------------|-------|---------|---------|----------------------|
| Tensile strength at yield        | D638  | 37 MPa  | 527-1   |                      |
| Tensile modulus                  | D638  |         | 527-1   |                      |
| Tensile elongation at yield      | D638  |         | 527-1   |                      |
| Tensile elongation at break      | D638  | 150 %   | 527-1   |                      |
| Flexural strength                | D790  | 33 MPa  | 178     |                      |
| Flexural modulus                 | D790  | 700 MPa | 178     |                      |
| Unnotched Izod impact strength   | D256  |         | 180/1U  |                      |
| Notched Izod impact strength     | D256  |         | 180/1A  |                      |
| Unnotched Charpy impact strength | D6110 |         | 179/1eU |                      |
| Notched Charpy impact strength   | D6110 |         | 179/1eA | 27 kJ/m <sup>2</sup> |
| Falling dart impact strength     |       |         | 6603-2  |                      |

### Thermal Properties

|                                         | ASTM              | Value  | ISO             | Value  |
|-----------------------------------------|-------------------|--------|-----------------|--------|
| Melting temperature                     | D3418             | 197 °C | 11357           | 197 °C |
| Coefficient of linear thermal expansion | E831<br>25 ~ 55°C |        | 11359           |        |
| Vicat softening point                   | D1525<br>5 kg     |        | 306/B50<br>50 N |        |
|                                         | D648              |        | 75              |        |
| Heat deflection temperature             | 66 psi            |        | 0.45 MPa        |        |
|                                         | 264 psi           |        | 1.8 MPa         |        |

## Extrusion Processing Conditions

|              | Value                     |
|--------------|---------------------------|
| Pre-drying   | Drying temperature        |
|              | 80 °C                     |
|              | Drying time               |
|              | 3 ~ 4 hr                  |
|              | Suggested max moisture    |
|              | 0.20 %                    |
| Temperature  | Adapter & Die temperature |
|              | 210 °C                    |
|              | Zone 5 temperature        |
|              | 210 °C                    |
|              | Zone 4 temperature        |
|              | 210 °C                    |
|              | Zone 3 temperature        |
|              | 215 °C                    |
|              | Zone 2 temperature        |
|              | 225 °C                    |
|              | Zone 1 temperature        |
|              | 230 °C                    |
|              | Jacket temperature        |
|              | < 50 °C                   |
|              | Processing temperature    |
|              | 210 ~ 230 °C              |
| Screw Design | L/D                       |
|              | > 26                      |
|              | Compression ratio         |
|              | 2.5 ~ 3.0                 |

\* The data listed here is not for specification warranty, but typical value.

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