

## Technical Data Sheet

### Moplen EP310J HP



Polypropylene, Impact Copolymer

#### Product Description

LyondellBasell has developed the new *Moplen* grade EP310J HP for the extrusion of films used for lamination on other substrates, which is highly appreciated by customers in the production of applications that can be processed under high retorting conditions. This new grade is produced using a non-phthalate catalyst system favored by customers in applications intended for food contact. The film viscosity achieved with *Moplen* EP310J HP offers good processability on cast, blown and BOPP lines. This polypropylene heterophasic copolymer exhibits high impact, good puncture, good tear resistance, high seal strength and seal integrity.

|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| <b>Application</b>       | Food Packaging Film; Lamination Film; Surface Protection Film |
| <b>Market</b>            | Flexible Packaging                                            |
| <b>Processing Method</b> | Blown Film; Cast Film                                         |
| <b>Attribute</b>         | Good Processability; Impact Copolymer; Medium Flow            |

| Typical Properties                  | Nominal Value | Units             | Test Method   |
|-------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                     |               |                   |               |
| Melt Flow Rate, (230 °C/2.16 kg)    | 3.0           | g/10 min          | ISO 1133-1    |
| Density                             | 0.90          | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                   |               |                   |               |
| Flexural Modulus                    | 1400          | MPa               | ISO 178       |
| Tensile Modulus                     | 1100          | MPa               | ISO 527-1, -2 |
| Tensile Stress at Break             | 54            | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield             | 30            | MPa               | ISO 527-1, -2 |
| <b>Film</b>                         |               |                   |               |
| Tensile Elongation at Break, MD     | 1175          | %                 | ISO 527-1, -3 |
| Tensile Elongation at Yield, MD     | 13            | %                 | ISO 527-1, -3 |
| <b>Impact</b>                       |               |                   |               |
| Charpy Impact Strength - Notched    |               |                   |               |
| (23 °C, Type 1, Edgewise, Notch A)  | 42.5          | kJ/m <sup>2</sup> | ISO 179-1/1eA |
| (-20 °C, Type 1, Edgewise, Notch A) | 1.5           | kJ/m <sup>2</sup> | ISO 179-1/1eA |
| <b>Thermal</b>                      |               |                   |               |
| Melting Temperature                 | 166           | °C                | LYB Method    |
| Crystallization Temperature         | 122           | °C                | LYB Method    |
| <b>Optical</b>                      |               |                   |               |
| Haze, (70 µm)                       | 6             | %                 | ASTM D1003    |
| Gloss                               | 72            | %                 | ASTM D2457    |