

# Moplen EP310D

#### Polypropylene, Impact Copolymer

# **Product Description**

"Moplen" EP310D is a low fluidity heterophasic copolymer designed for extrusion applications where smooth processability and high mechanical properties are of the utmost importance. Main applications are extrusion of film for heavy duty applications, adhesive tapes, lamination film and extrusion blow moulded containers for e.g. detergents. "Moplen" EP310D is suitable for food contact.

### **Product Characteristics**

**Status** Commercial: Active

**Test Method used** ISO ASTM

**Availability** Europe, Africa-Middle East

**Processing Method** Extrusion, Extrusion Blow Moulding

Features Copolymer, Impact, Flow, Low, Food Contact Acceptable,

Processability, Good

Typical Customer
Applications
Blow Moulding Applications, Containers, Film

Applications			
Typical Properties	Method	Value	e Unit
Physical			
Density	ISO 1183	0.900	g/cm³
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	0.80	g/10 min
Mechanical			
Tensile Modulus (1 mm/min)	ISO 527-1, -2	1200	MPa
Tensile Stress at Yield (50 mm/min)	ISO 527-1, -2	27.0	MPa
Tensile Strain at Break (50 mm/min)	ISO 527-1, -2	420	%
Tensile Strain at Yield (50 mm/min)	ISO 527-1, -2	11	%
Impact			
Charpy notched impact strength	ISO 179		
(-20 °C, Type 1, Edgewise, Notch A)		4.20	$kJ/m^2$
(0 °C, Type 1, Edgewise, Notch A)		6	$kJ/m^2$
(23 °C, Type 1, Edgewise, Notch A)		44	$kJ/m^2$
Hardness			
Shore hardness (Shore D)	ISO 868	62	
Thermal			
Heat deflection temperature B (0.45 MPa) Unannealed ISO 75B-1, -272.0			°C
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	150	°C

#### **Notes**

Typical properties; not to be construed as specifications.

## **Additional Properties**

Typical Film Properties: Gloss, ASTM D 2457, 60  $\mu m$ , 12 units Haze, ASTM D 1003, 60  $\mu m$ , 60% Tensile Young Modulus, ASTM D 882, 25 mm/min, 60  $\mu m$ : 1200 MPa Stress at Yield, ASTM D 882, 500 mm/min, 60  $\mu m$ , 27 MPa Elongation at Yield, ASTM D 882, 500 mm/min, 60  $\mu m$ , 7% Stress at Break, ASTM D 882, 500 mm/min, 60  $\mu m$ , 49 MPa Elongation at Break, ASTM D 882, 500 mm/min, 60  $\mu m$ , 830%

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