J1020FF20

LOW DENSITY POLYETHYLENE
GRADE FOR FOAM & FILM

J1020FF20 is a natural Low Density Polyethylene (LDPE) resin for foam and film extrusion.

It has very good melt strength which provides uniform cell structure, cell growth and stiffness in foam. The grade can be used for making foam using both physical and chemical blowing agents.

It can be used for manufacturing films as well. It can be processed easily on conventional blown film lines. The grade is manufactured without any slip additive to facilitate adhesion during lamination.

Additive Details:

J1020FF20: ● Slip: Nil ● Antiblock: Nil

TYPICAL CHARACTERISTICS*

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE**
Resin Properties			
Density (23^0 C)	ASTM D 792	g/cc	0.924
Melt Flow Index (190^O C / 2.16 Kg)	ASTM D 1238	g/10 min	1.8
Tensile Modulus	ASTM D 638	MPa	350
Tensile Yield Strength	ASTM D 638	MPa	10
Elongation at Break	ASTM D 638	%	400
Hardness (Shore D)	ASTM D 2240	Shore D	45
Vicat Softening Point (10 N)	ASTM D 1525	°C	96
DSC Melting Point	ASTM D 3418	°C	112

**Typical values on compression moulded test specimens moulded as per ASTM D4703, Procedure C.

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE#
Film Properties			
Tensile Strength at Break (MD / TD)	ASTM D 882	MPa	21.0 / 20.0
Elongation at Break (MD / TD)	ASTM D 882	%	275 / 425
Dart Impact Strength (F50)	ASTM D 1709/A	g / µm	3.0

Film properties on 40 µ film made with 0.7 mm die gap & 2.5 BUR

* Typical characteristics and not to be taken as specifications

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Typical Process Conditions for Foam Extrusion:

- Heating Zone (˚C): 150 – 200
- Cooling Zone (˚C): 80 – 100

Typical Process Conditions for Film Extrusion

- Typical Process Temp (˚C) - 160 – 200
- Recommended Blow Up Ratio (BUR): 2.0 – 3.0

APPLICATIONS:

Foams for Mattress, Packaging, Construction, Automotive, Footwear & other industrial applications.

Adhesive lamination film / Foam film

Regulatory Information

- Meets the requirements stipulated in standard IS: 10146 on "Specification for Polyethylene for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". It also conforms to IS 16738:2018 “Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals”
- The grade and the additives incorporated in it also comply with the FDA: CFR Title 21,177.1520, Olefin polymers.

Storage Recommendations

- Bags should be stored in dry/closed conditions at temperatures below 50°C and protected from UV / direct sunlight.

DISCLAIMER

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