



## Lupolen 3020 F

### Polyethylene, Low Density

#### Product Description

Lupolen 3020 F is a non-additivated, low density polyethylene with high rigidity, good opticals and good chemical resistance. It is delivered in pellet form.

Foodlaw compliance information about this product can be found in separate product documentation.

This product is not intended for use in medical and pharmaceutical applications.

#### Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe
Processing Methods	Blown Film, Extrusion Blow Molding
Features	Opticals, Good Processability, Good Stiffness
Typical Customer Applications	Bags & Pouches, Blown Film, Film, Food Packaging Film, Shrink Film, Surface Protection Film

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.927	g/cm³
Melt flow rate (MFR) (190°C/2.16kg)	ISO 1133	0.90	g/10 min
Mechanical			
Dart drop impact (50µm, Blown Film)	ASTM D 1709	120	g
Tensile Modulus	ISO 527-1, -2	300	MPa
Tensile Stress at Yield	ISO 527-1, -2	12.0	MPa
Tensile Strength	ISO 527-1, -3		
Note: MD		27.0	MPa
Note: TD		22.0	MPa
Tensile Strain at Break			
Note: MD		300	%
Note: TD	600	%	
Thermal			
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	100	°C
Melting Temperature	ISO 3146	114	°C
Optical			
Haze (50µm)	ASTM D 1003	<6,5	%
Gloss (20°, 50µm)	ASTM D 2457	>50	

(60°, 50µm)

>100

Film

Melt Temperature	170 to 220 °C
------------------	---------------

Additional Properties

Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 1:2.5.  
Failure Energy, DIN 53373, 50 µm: 4 J/mm  
Coefficient of Friction, ISO 8295: >80%  
Recommended Film Thickness: 25 to 80 µm

Notes

Typical properties; not to be construed as specifications.