

# **Technical Data Sheet**

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## **CLEARFLEX®**

LLDPE

## FG 308

Linear low density polyethylene

Clearflex FG 308 is an octene linear low density polyethylene (C8-LLDPE), additivated with antioxidant and processing aid, suitable for blown film extrusion.

Film manufactured with Clearflex FG 308 are characterised by a good balance between optical properties and mechanical performances.

## **Main Application**

Clearflex FG 308 is recommended for applications in which good mechanical properties and sealability are requested (flexible packaging with a certain rigidity). It is also the right choice for the production of silage film, either in coextrusion or in blend with LDPE.

## Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	1	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	-	g/10min	ISO 1133
Melt Flow Rate (190 °C/21.6 kg)	-	g/10min	ISO 1133
Density	0.925	g/cm3	ISO 1183
Melting Point	125	°C	Internal method
Brittleness temperature	< - 70	°C	ASTM D 746
Vicat softening point (1 kg)	107	°C	ISO 306/A
Film Properties *	Value	Unit	Test Method
Tensile stress at yeld MD	12	MPa	ISO 527-3
	12	МРа	ISO 527-3
Tensile stress at yeld TD			
Tensile strenght at break MD	45	MPa	ISO 527-3
Tensile strenght at break TD	42	MPa	ISO 527-3
Elongation at breack MD	500	%	ISO 527-3
Elongation at breack TD	750	%	ISO 527-3
1% Secant modulus MD	230	MPa	ISO 527-3
1% Secant modulus TD	250	MPa	ISO 527-3
Elmendorf tear resistance MD	100	N/mm	ISO 6383-2
Elmendorf tear resistance TD	250	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	150	g	ISO 7765-1
Dynamic coefficient of friction (COF)	> 0.5	-	ISO 8295
Haze	12	%	ISO 14782
Gloss, 45°	55	%	ASTM D 2472
Recommended film thickness	10 ÷ 50	micron	-

\* Typical value for a film extruded between 190°-230°C, with BUR 2.5, thickness 25 μm. Actual properties are typical and may vary depending upon operating conditions and additive package.

### **Processing notes**

Clearflex FG 308 is easily processable using blown film technology. Melt temperature should be between 190°C and 230°C. Recommended thickness: 10 - 50  $\mu$ m.

## Storage and Hadling

Clearflex FG 308 is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletised polyethylene resin, provided the equipment is designed to prevent accumulation of the fines and dust particles that are contained in all polyethylene resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used be equipped with filters of adequate size, operated and maintained in such a manner to ensure that no leaks develop and earthed adequately. We further recommend that good housekeeping be practised throughout your facility.

The product should be stored in dry conditions at temperatures below 50°C and protected from sunlight.

Improper storage can initiate degradation which results in odour generation, colour changes and can have negative effects on the physical properties of the product.

Before using this product it is recommended to read and understand the relevant Safety Data Sheet.

### **Availability**

Contact the Versalis sales office nearest to you regarding availability and your specific application requirements.

#### **Food Contact Status**

Clearflex FG 308 complies with the rules and regulations of the European Union, as well as other countries, regarding the use of plastic materials in food contact applications. Certificates of compliance are available upon request.

### TECHNICAL SERVICE

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IMPORTANT: please consult the relevant safety data sheet for more detailed information. The information and data presented herein are to the best of our knowledge true and accurate but no warranty or guarantee, expressed or implied, is made nor is any liability accepted with respect to the use of such information and data.

Versalis is available to provide the guaranteed values for each product on demand.