

Technical Data Sheet

info.polyethylene@versalis.eni.com

CLEARFLEX® H&T

LFH 208

LLDPE

Linear low density polyethylene

Clearflex H&T LFH 208 is an octene copolymer linear low density polyethylene (C8-LLDPE), with antioxidants and processing aid, suitable for blown film extrusion.

Films obtained from Clearflex H&T LFH 208 have excellent optical properties (haze and gloss), wide sealing temperature window, together with optimal sealing resistance, outstanding tear, impact and puncture resistance. Its properties make Clearflex H&T LFH 208 the right choice for top end performance applications.

Main Application

Due to its excellent sealing behaviour, Clearflex H&T LFH 208 is recommended for packaging of food and edible fats and for applications requiring a superior sealing performance. Its very low gel content makes it ideal for lamination. Clearflex H&T LFH 208 is also recommended for silage stretch film production, due to its outstanding mechanical properties.

nin Properties			
Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	0.75	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	0.920	g/cm3	ISO 1183
Melting Point	119	°C	Internal method
Brittleness temperature	< - 70	°C	ASTM D 746
Vicat softening point (1 kg)	102	°C	ISO 306/A
Film Properties *	Value	Unit	Test Method
Tensile stress at yeld MD	10	MPa	ISO 527-3
Tensile stress at yeld TD	10	MPa	ISO 527-3
Tensile strenght at break MD	50	MPa	ISO 527-3
Tensile strenght at break TD	45	MPa	ISO 527-3
Elongation at breack MD	600	%	ISO 527-3
Elongation at breack TD	750	%	ISO 527-3
1% Secant modulus MD	200	MPa	ISO 527-3
1% Secant modulus TD	250	MPa	ISO 527-3
Elmendorf tear resistance MD	180	N/mm	ISO 6383-2
Elmendorf tear resistance TD	250	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	250	g	ISO 7765-1
Dynamic coefficient of friction (COF)	> 0.5	-	ISO 8295
Haze	9	%	ISO 14782
Gloss, 45°	60	%	ASTM D 2480
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.

Clearflex ® is a registered trademark of Versalis

Processing notes

Clearflex H&T LFH 208 is easily processable using blown film technology. Melt temperature should be between 190°C and 230°C. Clearflex H&T LFH 208 can be extruded at thickness below 15 µm.

Storage and Hadling

Clearflex H&T LFH 208 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 H&T LFH 208 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

Versalis S.p.A. Piazza Boldrini, 1 20097 S.Donato Milanese, Italia Tel. +39 02 520.1 Fax + 39 02 520.42436 Polimeri Europa SAS 1 Route des Dunes BP 59 F-59279 MARDYCK - France Tel. +33 3 28235515 Fax +33 3 28235520 Versalis S.p.A. Via Taliercio, 14 46100 Mantova, Italia Tel. +39 0376 305667 Fax +39 02 52043

HEADQUARTER

Versalis S.p.A. Piazza Boldrini, 1 20097 S.Donato Milanese, Italia Tel. +39 02 520.1 Fax + 39 02 520.42436

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 quaranteed values for each product on demand.