# **Technical Data Sheet**

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# **CLEARFLEX** ® **H&T**

**LGH 138** 

**LLDPE** 

www.polimerieuropa.com

Linear low density polyethylene

Clearflex H&T LGH 138 is an octene copolymer linear low density polyethylene (C8-LLDPE), with antioxidants, slip agent, antiblocking and processing aid, suitable for blown film extrusion.

Films obtained from Clearflex H&T LGH 138 show excellent optical properties, a wide sealing window, both hot tack and heat seal, together with a low sealing initiation temperature (S.I.T.) and outstanding impact, puncture and Elmendorf tear resistance.

# **Main applications**

Clearflex H&T LGH 138, for its overall characteristics, is the right choice for packaging film applications requiring superior mechanical and optical properties. The excellent sealability behaviour together with low gel content makes it ideal for lamination film production.

#### **Main properties**

Resin Properties	Test method	Unit	Value
Melt Flow Rate (190 °C/ 2.16 kg)	ISO 1133	g/10min	0.9
Density	ISO 1183	g/cm³	0.917
Melting point	Internal method	°C	117
Brittleness point	ASTM D 746	°C	< - 70
Vicat softening point (1 kg)	ISO 306/A	°C	102

Film Properties *	Test method		Unit	Value
Tensile stress at yield	ISO 527-3	MD	MPa	9
	ISO 527-3	TD	MPa	9
Tensile strenght at break	ISO 527-3	MD	MPa	40
	ISO 527-3	TD	MPa	40
Elongation at break	ISO 527-3	MD	%	450
	ISO 527-3	TD	%	700
1% Secant modulus	ISO 527-3	MD	MPa	160
	ISO 527-3	TD	MPa	170
Elmendorf tear resistance	ISO 6383-2	MD	N/mm	110
	ISO 6383-2	TD	N/mm	200
Impact resistance F50 (Dart Drop Test)	ISO 7765-1		g	350
Dynamic coefficient of friction (COF)	ISO 8295			0.11
Haze	ISO 14782		%	11
Gloss, 45°	ASTM D 2457		%	55
Recommended film thickness			micron	10 ÷ 50

<sup>(\*)</sup> Typical value for a film extruded between 190°-230°C, with BUR 2.5, thickness 25  $\mu$ m. Actual properties are typical and may vary depending upon operating conditions and additive package.

#### **Processing conditions**

Clearflex H&T LGH 138 is easily processable using blown film technology. Melt temperature should be between 190°C and 230°C. Clearflex H&T LGH 138 can be extruded at thickness below 15 µm.

#### Storage and handling

Clearflex H&T LGH 138 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.

Stored in an airy and dry room, at temperatures between 20°C and 30°C, with no direct sunlight, the shelf life is about 18 months. However, before using this product, read and understand the relevant POLIMERI EUROPA Safety Data Sheet.

#### **Availability**

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

## **Food contact status**

Clearflex H&T LGH 138 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.

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