

Technical Data

Product Description

QAMAR FD21HS is a Linear Low Density Polyethylene material. It is available in North America for blown film or cast film.

Important attributes of QAMAR FD21HS are:

- Antiblock
- Clarity
- Slip

Typical application of QAMAR FD21HS: Film

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Availability	• North America
Additive	• Antiblock • Slip
Features	• Antiblocking • High Clarity • General Purpose • Slip
Uses	• Cast Film • Film • General Purpose
Forms	• Pellets
Processing Method	• Blown Film • Cast Film

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			JIS K6760
Yield	1740 psi	12.0 MPa	
Break	3770 psi	26.0 MPa	
Tensile Strain (Break)	900 %	900 %	JIS K6760
Apparent Bending Modulus	37700 psi	260 MPa	ASTM D747

Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.2 mil	30 µm	
Tensile Modulus			ISO IR 1184
MD : 1.2 mil (30 µm)	27600 psi	190 MPa	
TD : 1.2 mil (30 µm)	30500 psi	210 MPa	
Tensile Stress			JIS Z1702
MD : Break, 1.2 mil (30 µm)	5800 psi	40.0 MPa	
TD : Break, 1.2 mil (30 µm)	5080 psi	35.0 MPa	
Tensile Elongation			JIS Z1702
MD : Break, 1.2 mil (30 µm)	600 %	600 %	
TD : Break, 1.2 mil (30 µm)	900 %	900 %	
Dart Drop Impact (1.2 mil (30 µm))	110 g	110 g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD : 1.2 mil (30 µm)	30 g	30 g	
TD : 1.2 mil (30 µm)	140 g	140 g	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	54	54	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -94.0 °F	< -70.0 °C	ASTM D746
Vicat Softening Temperature	212 °F	100 °C	ASTM D1525
Melting Temperature	252 °F	122 °C	DSC



QAMAR FD21HSLinear Low Density Polyethylene
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Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze (1.18 mil (30.0 µm))	12 %	12 %	ASTM D1003

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	338 to 374 °F	170 to 190 °C
Melt Temperature (Aim)	356 °F	180 °C

Extrusion Notes

Blow up Ratio: 2 to 4
Screw Type: LLDPE screw
Die Lip Gap: 2.0 to 3.0 mm
Air Ring: Single or Dual Slit (Wide die)

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

