

QAMAR FC21HS

Linear Low Density Polyethylene

SPDC Ltd.



General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Additive	• Antiblock	• Slip	
Features	• Antiblocking • General Purpose	• High Clarity • Slip	
Uses	• Film	• General Purpose	
Forms	• Pellets		
Processing Method	• Blown Film		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm³	0.918 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)	1.0 g/10 min	1.0 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	4640 psi	32.0 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)	31900 psi	220 MPa	
Tensile Stress			JIS Z1702
MD: Break, 1.2 mil (30 µm)	7980 psi	55.0 MPa	
TD: Break, 1.2 mil (30 µm)	5800 psi	40.0 MPa	
Tensile Elongation			JIS Z1702
MD: Break, 1.2 mil (30 µm)	550 %	550 %	
TD: Break, 1.2 mil (30 µm)	850 %	850 %	
Dart Drop Impact (1.2 mil (30 µm))	120 g	120 g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD: 1.2 mil (30 µm)	30 g	30 g	
TD: 1.2 mil (30 µm)	160 g	160 g	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	55	55	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -94.0 °F	< -70.0 °C	ASTM D746
Vicat Softening Temperature	216 °F	102 °C	ASTM D1525
Melting Temperature	252 °F	122 °C	DSC

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze (1.18 mil (30.0 µm))	9.0 %	9.0 %	ASTM D1003

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	374 to 410 °F	190 to 210 °C
Melt Temperature (Aim)	392 °F	200 °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 Typical properties: these are not to be construed as specifications.



BMI POLYMER

Revision History

Document Created: Friday, August 03, 2012
Added to Prospector: March, 2000
Last Updated: 3/10/2008