QAMAR CD18N

Linear Low Density Polyethylene SPDC Ltd.



Technical Data

Product Description

QAMAR CD18N is a Linear Low Density Polyethylene material. It is available in Africa & Middle East, Asia Pacific, Europe, or North America for cast film. Primary attribute of QAMAR CD18N: High Flow.

Typical application of QAMAR CD18N: Film

General			
Material Status	 Commercial: Active 		
Literature 1	 Technical Datasheet (Eng 	lish)	
Availability	Africa & Middle EastAsia Pacific	EuropeNorth America	
Features	 Additive Free 	High Flow	
Uses	 Cast Film 		
Processing Method	 Cast Film 		

Tensile Stress (Yield) 1310 psi 9.00 MPa ISO 1872-2 Tensile Strain (Break) > 430 % > 430 % > 430 % So 1872-2 Flexural Modulus So 1872-2 Flexu	Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Mechanical Nominal Value (English) Nominal Value (SI) Test Method Tensile Stress (Yield) 1310 psi 9.00 MPa ISO 1872-2 Tensile Strein (Break) > 430 % > 430 % ISO 1872-2 Flexural Modulus 29000 psi 200 MPa ISO 1872-2 Films Nominal Value (English) Nominal Value (SI) Test Method Film Thickness - Tested 1.2 mil 30 μm ISO 527-3 Tensile Modulus 27600 psi 190 MPa ISO 527-3 MD : 1.2 mil (30 μm) 27600 psi 190 MPa ISO 527-3 MD : 1.2 mil (30 μm) 30500 psi 210 MPa ISO 527-3 MD : Break, 1.2 mil (30 μm) 5080 psi 35.0 MPa ISO 527-3 TD : Break, 1.2 mil (30 μm) 4350 psi 30.0 MPa ISO 527-3 MD : Break, 1.2 mil (30 μm) 600 % 600 % ISO 527-3 MD : Break, 1.2 mil (30 μm) 900 % 900 % ISO 527-3 MD : 1.2 mil (30 μm) 900 % 900 % ISO 638-2 MD : 1.2 mil (30 μm) 6.7 lbf 30.N <td< td=""><td>Density</td><td>0.918 g/cm³</td><td>0.918 g/cm³</td><td>ASTM D4883</td></td<>	Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D4883
Tensile Stress (Yield) 1310 psi 9.00 MPa 1SO 1872-2 Tensile Strain (Break) 2430 % 29000 psi 200 MPa 1SO 1872-2 Flexural Modulus 29000 psi 200 MPa 1SO 1872-2 Flexural Modulus 29000 psi 200 MPa 1SO 1872-2 Flexural Modulus 1SO 527-3 Flex Method Film Thickness - Tested 1.2 mil (30 μm) 27600 psi 190 MPa 1T0 : 1.2 mil (30 μm) 1T0 : 1.2 mil (30 μm) 1T0 : Break, 1.2 mil (3	Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.8 g/10 min	2.8 g/10 min	ISO 1872-2
Tensile Strain (Break)	Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Flexural Modulus 29000 psi 200 MPa ISO 1872-2	Tensile Stress (Yield)	1310 psi	9.00 MPa	ISO 1872-2
Film Nominal Value (English) Nominal Value (SI) Test Method	Tensile Strain (Break)	> 430 %	> 430 %	ISO 1872-2
Film Thickness - Tested	Flexural Modulus	29000 psi	200 MPa	ISO 1872-2
Tensile Modulus	Films	Nominal Value (English)	Nominal Value (SI)	Test Method
MD : 1.2 mil (30 μm) TD : 1.2 mil (30 μm) 30500 psi 30500 psi 210 MPa Tensile Stress MD : Break, 1.2 mil (30 μm) 5080 psi 35.0 MPa TD : Break, 1.2 mil (30 μm) Tensile Elongation MD : Break, 1.2 mil (30 μm) Tensile Elongation MD : Break, 1.2 mil (30 μm) To Break, 1.2 mil (40 μ	Film Thickness - Tested	1.2 mil	30 μm	
TD: 1.2 mil (30 μm) Tensile Stress MD: Break, 1.2 mil (30 μm) Tensile Elongation MD: Break, 1.2 mil (30 μm) Tensile Elongation MD: Break, 1.2 mil (30 μm) Tensile Elongation MD: Break, 1.2 mil (30 μm) To: To: Deteck, 1.2 mil (30 μm) To:	Tensile Modulus			ISO 527-3
Tensile Stress	MD : 1.2 mil (30 μm)	27600 psi	190 MPa	
MD : Break, 1.2 mil (30 μm) TD : Break, 1.2 mil (30 μm) Tensile Elongation MD : Break, 1.2 mil (30 μm) MD : 1.2 mil (30 μm) Mominal Value (English) Mominal Value (SI) Mominal Value (English) Mominal Value	TD : 1.2 mil (30 µm)	30500 psi	210 MPa	
TD : Break, 1.2 mil (30 μm) Tensile Elongation MD : Break, 1.2 mil (30 μm) Dart Drop Impact (1.2 mil (30 μm)) Elmendorf Tear Strength MD : 1.2 mil (30 μm) TD : 1.2 mil (30 μm) TO : 1.2 mil (30	Tensile Stress			ISO 527-3
Tensile Elongation MD : Break, 1.2 mil (30 μm) 900 % 900 % 900 % Dart Drop Impact (1.2 mil (30 μm)) 100 g 100 g ISO 7765-1 Elmendorf Tear Strength ISO 6383-2 MD : 1.2 mil (30 μm) 6.7 lbf 30 N TD : 1.2 mil (30 μm) 27 lbf 120 N Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F < -70.0 °C ISO 974 Vicat Softening Temperature 210 °F 99.0 °C ISO 306 Melting Temperature 252 °F 122 °C ISO 11357-3 Optical Nominal Value (English) Nominal Value (SI) Test Method Test Method Test Method Test Method Test Method Test Method Test Method Test Method Test Method Test Method Test Method Tes	MD : Break, 1.2 mil (30 μm)	5080 psi	35.0 MPa	
MD : Break, 1.2 mil (30 μm) TD : Break, 1.2 mil (30 μm) 900 % 900 % Dart Drop Impact (1.2 mil (30 μm)) Elmendorf Tear Strength MD : 1.2 mil (30 μm) For 1.2 mil (30 μm) Nominal Value (English) For Hardness (Shore D) For Hardness (Shore D) Nominal Value (English) For Hardness (Shore D) For Hardness (Shore	TD : Break, 1.2 mil (30 μm)	4350 psi	30.0 MPa	
TD : Break, 1.2 mil (30 µm) 900 % 900 % Dart Drop Impact (1.2 mil (30 µm)) 100 g 100 g ISO 7765-1 Elmendorf Tear Strength ISO 6383-2 ISO 6383-2 MD : 1.2 mil (30 µm) 6.7 lbf 30 N TEST Method TD : 1.2 mil (30 µm) 27 lbf 120 N Test Method Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	Tensile Elongation			ISO 527-3
Dart Drop Impact (1.2 mil (30 µm)) 100 g 100 g ISO 7765-1 Elmendorf Tear Strength ISO 6383-2 ISO 6383-2 MD : 1.2 mil (30 µm) 6.7 lbf 30 N TD : 1.2 mil (30 µm) 27 lbf 120 N Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	MD : Break, 1.2 mil (30 μm)	600 %	600 %	
Elmendorf Tear Strength	TD : Break, 1.2 mil (30 μm)	900 %	900 %	
MD : 1.2 mil (30 µm) 6.7 lbf 30 N TD : 1.2 mil (30 µm) 27 lbf 120 N Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F < -70.0 °C ISO 974 Vicat Softening Temperature 210 °F 99.0 °C ISO 306 Melting Temperature 252 °F 122 °C ISO 11357-3 Optical Nominal Value (English) Nominal Value (SI) Test Method	Dart Drop Impact (1.2 mil (30 μm))	100 g	100 g	ISO 7765-1
TD: 1.2 mil (30 µm) 27 lbf 120 N Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	Elmendorf Tear Strength			ISO 6383-2
Hardness Nominal Value (English) Nominal Value (SI) Test Method Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	MD : 1.2 mil (30 μm)	6.7 lbf	30 N	
Shore Hardness (Shore D) 54 54 ISO 868 Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	TD : 1.2 mil (30 μm)	27 lbf	120 N	(R)
Thermal Nominal Value (English) Nominal Value (SI) Test Method Brittleness Temperature < -94.0 °F	Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature < -94.0 °F	Shore Hardness (Shore D)	54	54	ISO 868
Vicat Softening Temperature 210 °F 99.0 °C ISO 306 Melting Temperature 252 °F 122 °C ISO 11357-3 Optical Nominal Value (English) Nominal Value (SI) Test Method	Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature 252 °F 122 °C ISO 11357-3 Optical Nominal Value (English) Nominal Value (SI) Test Method	Brittleness Temperature	< -94.0 °F	< -70.0 °C	ISO 974
Optical Nominal Value (English) Nominal Value (SI) Test Method	Vicat Softening Temperature	210 °F	99.0 °C	ISO 306
	Melting Temperature	252 °F	122 °C	ISO 11357-3
Haze (1.18 mil (30.0 μm)) 12 % 12 % ISO 14782	Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
	Haze (1.18 mil (30.0 µm))	12 %	12 %	ISO 14782

Extrusion Notes

Resin Temperature: 180°C Blow up ratio: 2.0 Extruder: 40mm, L/D=24 Die Diameter: 75mm

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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.



