

QAMAR FC18N

Linear Low Density Polyethylene

SPDC Ltd.



Prospector

General

| | | |
|-------------------|--|-----------------------------|
| Material Status | • Commercial: Active | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • North America |
| Features | • Additive Free | |
| Uses | • Blending | • Film |
| Forms | • Pellets | |
| Processing Method | • Blown Film | |

| Physical | Nominal Value Unit | Test Method |
|---|-------------------------|-------------|
| Density | 0.918 g/cm ³ | ASTM D1505 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 1.0 g/10 min | ASTM D1238 |

| Mechanical | Nominal Value Unit | Test Method |
|--------------------------|--------------------|-------------|
| Tensile Stress | | JIS K6760 |
| Yield | 12.0 MPa | |
| Break | 32.0 MPa | |
| Tensile Strain (Break) | 900 % | JIS K6760 |
| Apparent Bending Modulus | 260 MPa | ASTM D747 |

| Films | Nominal Value Unit | Test Method |
|--|--------------------|-------------|
| Film Thickness - Recommended / Available | 30 µm | |
| Tensile Modulus | | ISO IR 1184 |
| MD | 190 MPa | |
| TD | 220 MPa | |
| Tensile Stress | | JIS Z1702 |
| MD: Break | 55.0 MPa | |
| TD: Break | 40.0 MPa | |
| Tensile Elongation | | JIS Z1702 |
| MD: Break | 550 % | |
| TD: Break | 850 % | |
| Dart Drop Impact | 120 g | ASTM D1709 |
| Elmendorf Tear Strength | | ASTM D1922 |
| MD | 30 g | |
| TD | 160 g | |

| Hardness | Nominal Value Unit | Test Method |
|------------------------------|--------------------|-------------|
| Durometer Hardness (Shore D) | 55 | ASTM D2240 |

| Thermal | Nominal Value Unit | Test Method |
|-----------------------------|--------------------|-------------|
| Brittleness Temperature | < -70.0 °C | ASTM D746 |
| Vicat Softening Temperature | 102 °C | ASTM D1525 |
| Melting Temperature | 122 °C | DSC |

| Optical | Nominal Value Unit | Test Method |
|---------|--------------------|-------------|
| Haze | 8.0 % | ASTM D1003 |

| Extrusion | Nominal Value Unit |
|------------------------|--------------------|
| Melt Temperature | 190 to 210 °C |
| Melt Temperature (Aim) | 200 °C |

Extrusion Notes

Blow up Ratio: 2-4
 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.