

# QAMAR

GRADE : FC18N

# SPDC LTD.

2-13-10 Nagata-cho, Chiyoda-ku, Tokyo 100-0014 JAPAN

Prudential Tower 8th Floor

Phone : 81-3-5156-8555 Facsimile : 81-3-5156-8558

## Typical Properties

| Item                             | Test Method | Unit              | Value          |
|----------------------------------|-------------|-------------------|----------------|
| Melt Flow Rate                   | ASTM D-1238 | g/10min           | 1.0            |
| Density                          | ASTM D-1505 | g/cm <sup>3</sup> | 0.918          |
| Tensile Strength at Yield        | JIS K-6760  | Mpa               | 12             |
| Tensile Strength at Break        |             | Mpa               | 32             |
| Tensile Elongation at Break      |             | %                 | 900            |
| Stiffness in Flexure             | ASTM D-747  | Mpa               | 260            |
| Surface Hardness                 | ASTM D-2240 | Shore D           | 55             |
| Brittle Temperature              | ASTM D-746  | degree-C          | <-70           |
| Melting Point                    | DSC Method  | degree-C          | 122            |
| Vicat Softening Point            | ASTM D-1525 | degree-C          | 102            |
| Anti-blocking Agent / Slip Agent | -           | level             | none           |
| Characteristics                  |             |                   | basic material |
| Application                      |             |                   | blend          |

Values in this table represent typical laboratory averages.

## Typical Film Properties

| Item                        | Test Method       | Unit    | Value        |     |
|-----------------------------|-------------------|---------|--------------|-----|
| Film Thickness              |                   | microns | 30           |     |
| Tensile Strength at Break   | JIS Z 1702        | MPa     | MD           | 55  |
|                             |                   |         | TD           | 40  |
| Tensile Elongation at Break | JIS Z 1702        | %       | MD           | 550 |
|                             |                   |         | TD           | 850 |
| Tensile Modules             | ISO IR 1184       | MPa     | MD           | 190 |
|                             |                   |         | TD           | 220 |
| Dart Drop Impact Strength   | ASTM D-1709       | gms     | 120          |     |
| Elmendorf Tear Strength     | ASTM D-1922       | N/mm    | MD           | 30  |
|                             |                   |         | TD           | 160 |
| Haze                        | ASTM D-1003       | %       | 8            |     |
| Processing                  | Resin Temperature |         | 200 degree-C |     |
| Conditions of Film          | Blow up ratio     |         | 2.0          |     |

Values in this table represent typical laboratory averages. MD : Machine Direction TD : Transverse Direction

## Typical Processing Condition of Blown Film

| Item                           | Value                                 |
|--------------------------------|---------------------------------------|
| Resin Temperature ( degree-C ) | 190 - 210                             |
| Blow up Ratio                  | 2 - 4                                 |
| Screw Type                     | LLDPE screw                           |
| Die Lip Gap ( mm )             | 2.0 - 3.0                             |
| Air Ring                       | Dual Slit or Single Slit ( Wide die ) |

Figures shown in this table are typical conditions for reference purpose. Adjustment to meet individual machine is necessary.