

# Radilon® S 35F 100 NAT

Polyamide 6

Radici Plastics

## Message:

PA6 medium-high viscosity extrusion grade. Natural colour.  
Suitable for extrusion of cast and blown films, and monofilaments.  
ISO 1043 : PA6

| General Information                                                |                       |             |                    |                 |
|--------------------------------------------------------------------|-----------------------|-------------|--------------------|-----------------|
| Features                                                           | Medium-high Viscosity |             |                    |                 |
| Uses                                                               | Blown Film            |             |                    |                 |
|                                                                    | Cast Film             |             |                    |                 |
|                                                                    | Monofilaments         |             |                    |                 |
| RoHS Compliance                                                    | RoHS Compliant        |             |                    |                 |
| Appearance                                                         | Natural Color         |             |                    |                 |
| Processing Method                                                  | Extrusion             |             |                    |                 |
|                                                                    | Injection Molding     |             |                    |                 |
| Resin ID (ISO 1043)                                                | PA6                   |             |                    |                 |
| Physical                                                           | Dry                   | Conditioned | Unit               | Test Method     |
| Density                                                            | 1.14                  | --          | g/cm <sup>3</sup>  | ISO 1183        |
| Water Absorption                                                   |                       |             |                    | ISO 62          |
| Saturation, 23°C, 2.00 mm                                          | 10                    | --          | %                  |                 |
| Equilibrium, 23°C, 2.00 mm, 50% RH                                 | 2.9                   | --          | %                  |                 |
| Viscosity Number (H <sub>2</sub> SO <sub>4</sub> (Sulphuric Acid)) | 205                   | --          | cm <sup>3</sup> /g | ISO 307         |
| Mechanical                                                         | Dry                   | Conditioned | Unit               | Test Method     |
| Tensile Modulus                                                    | 2900                  | 1200        | MPa                | ISO 527-2/1A/1  |
| Tensile Stress (Yield)                                             | 75.0                  | 40.0        | MPa                | ISO 527-2/1A/50 |
| Tensile Strain (Yield)                                             | 4.0                   | 30          | %                  | ISO 527-2/1A/50 |
| Nominal Tensile Strain at Break                                    | > 50                  | > 50        | %                  | ISO 527-2/1A/50 |
| Flexural Modulus <sup>1</sup>                                      | 2500                  | 750         | MPa                | ISO 178         |
| Flexural Stress <sup>2</sup>                                       | 100                   | 30.0        | MPa                | ISO 178         |
| Impact                                                             | Dry                   | Conditioned | Unit               | Test Method     |
| Charpy Notched Impact Strength                                     |                       |             |                    | ISO 179/1eA     |
| -30°C                                                              | 6.0                   | --          | kJ/m <sup>2</sup>  |                 |
| 23°C                                                               | 7.0                   | --          | kJ/m <sup>2</sup>  |                 |

| Thermal                              | Dry          | Conditioned | Unit    | Test Method    |
|--------------------------------------|--------------|-------------|---------|----------------|
| Heat Deflection Temperature          |              |             |         |                |
| 0.45 MPa, Unannealed                 | 170          | --          | °C      | ISO 75-2/Bf    |
| 1.8 MPa, Unannealed                  | 55.0         | --          | °C      | ISO 75-2/Af    |
| Vicat Softening Temperature          | 195          | --          | °C      | ISO 306/B50    |
| Melting Temperature <sup>3</sup>     | 220          | --          | °C      | ISO 11357      |
| Electrical                           | Dry          | Conditioned | Unit    | Test Method    |
| Surface Resistivity                  | 1.0E+12      | 1.0E+10     | ohms    | IEC 60093      |
| Volume Resistivity                   | 1.0E+15      | 1.0E+13     | ohms·cm | IEC 60093      |
| Comparative Tracking Index           | 600          | --          | V       | IEC 60112      |
| Flammability                         | Dry          | Conditioned | Unit    | Test Method    |
| Burning Rate                         | 0.0          | --          | mm/min  | FMVSS 302      |
| Flame Rating (0.800 mm)              | HB           | --          |         | UL 94          |
| Glow Wire Flammability Index         |              |             |         | IEC 60695-2-12 |
| 1.00 mm                              | 850          | --          | °C      |                |
| 2.00 mm                              | 825          | --          | °C      |                |
| Glow Wire Ignition Temperature       |              |             |         | IEC 60695-2-13 |
| 1.00 mm                              | 875          | --          | °C      |                |
| 2.00 mm                              | 700          | --          | °C      |                |
| Injection                            | Dry          | Unit        |         |                |
| Drying Temperature - Desiccant Dryer | 80.0         |             | °C      |                |
| Drying Time - Desiccant Dryer        | 2.0 to 4.0   |             | hr      |                |
| Dew Point - Desiccant Dryer          | < -20.0      |             | °C      |                |
| Suggested Max Moisture               | 0.15         |             | %       |                |
| Processing (Melt) Temp               | 250 to 280   |             | °C      |                |
| Mold Temperature                     | 70.0 to 80.0 |             | °C      |                |
| Injection Rate                       | Moderate     |             |         |                |
| Extrusion                            | Dry          | Unit        |         |                |
| Drying Temperature                   | 80.0         |             | °C      |                |
| Drying Time                          | 2.0 to 4.0   |             | hr      |                |
| Suggested Max Moisture               | 0.15         |             | %       |                |
| Melt Temperature                     | 240 to 270   |             | °C      |                |
| NOTE                                 |              |             |         |                |
| 1.                                   | 2.0 mm/min   |             |         |                |
| 2.                                   | 2.0 mm/min   |             |         |                |
| 3.                                   | 10°C/min     |             |         |                |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519  
Phone: +86 13424755533  
Email: sales@su-jiao.com  
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

