

## Technical Data Sheet

### Schulamid 6 MV14 GRY967574



Polyamide 6

#### Product Description

Schulamid 6 MV14 GRY967574 is a Polyamide 6 material and is typically used in Injection Molding applications. Features include: Good Processability, Good Toughness, Medium Viscosity, and Oil Resistant.

|                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| Processing Method | Injection Molding                                                    |
| Attribute         | Good Processability; Good Toughness; Medium Viscosity; Oil Resistant |
| Resin ID          | PA6                                                                  |

| Typical Properties                               | Nominal Value | Units              | Test Method |
|--------------------------------------------------|---------------|--------------------|-------------|
| <b>Physical</b>                                  |               |                    |             |
| Density, (Method A)                              | 1.13          | g/cm <sup>3</sup>  | ISO 1183    |
| Viscosity Number                                 | 145           | cm <sup>3</sup> /g | ISO 307     |
| <b>Mechanical</b>                                |               |                    |             |
| Flexural Strain at Flexural Strength             | 6.5           | %                  | ISO 178     |
| Tensile Stress at Yield                          |               |                    |             |
| (Type 1A, 50 mm/min)                             | 80.0          | MPa                | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned               | 45.0          | MPa                | ISO 527-2   |
| Nominal Tensile Strain at Break                  |               |                    |             |
| (50 mm/min, Type 1A) - Conditioned               | >100          | %                  | ISO 527-2   |
| (50 mm/min, Type 1A)                             | 10            | %                  | ISO 527-2   |
| Flexural Modulus                                 | 2300          | MPa                | ISO 178     |
| Tensile Strain at Yield                          |               |                    |             |
| (Type 1A, 50 mm/min)                             | 4.0           | %                  | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned               | 20            | %                  | ISO 527-2   |
| Tensile Modulus                                  |               |                    |             |
| (1 mm/min, Type 1A)                              | 3000          | MPa                | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                | 1100          | MPa                | ISO 527-1   |
| Flexural Stress                                  | 100           | MPa                | ISO 178     |
| <b>Impact</b>                                    |               |                    |             |
| Charpy Impact Strength - Notched                 |               |                    |             |
| (23 °C, Type 1, Edgewise, Notch A)               | 7.0           | kJ/m <sup>2</sup>  | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)              | 5.0           | kJ/m <sup>2</sup>  | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 50            | kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Impact Strength - Unnotched               |               |                    |             |
| (23 °C, Type 1, Edgewise)                        | No Break      |                    | ISO 179     |
| (-30 °C, Type 1, Edgewise)                       | No Break      |                    | ISO 179     |
| (23 °C, Type 1, Edgewise) - Conditioned          | No Break      |                    | ISO 179     |

|                                                                     |                      |              |                      |
|---------------------------------------------------------------------|----------------------|--------------|----------------------|
| <b>Thermal</b>                                                      |                      |              |                      |
| Vicat Softening Temperature                                         |                      |              |                      |
| (B (50N), 50 °C/h)                                                  | 190                  | °C           | ISO 306              |
| (A (10N), 50 °C/h)                                                  | 210                  | °C           | ISO 306              |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 170                  | °C           | ISO 75-2/B           |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 60.0                 | °C           | ISO 75-2/A           |
| RTI Elec                                                            |                      |              |                      |
| (1.5 mm)                                                            | 65.0                 | °C           | UL 746B              |
| (3.0 mm)                                                            | 65.0                 | °C           | UL 746B              |
| RTI Imp                                                             |                      |              |                      |
| (1.5 mm)                                                            | 65.0                 | °C           | UL 746B              |
| (3.0 mm)                                                            | 65.0                 | °C           | UL 746B              |
| RTI Str                                                             |                      |              |                      |
| (1.5 mm)                                                            | 65.0                 | °C           | UL 746B              |
| (3.0 mm)                                                            | 65.0                 | °C           | UL 746B              |
| <b>Electrical</b>                                                   |                      |              |                      |
| Volume Resistivity                                                  | >1.0E+13             | ohm*m        | IEC 62631-3-1        |
| - Conditioned                                                       | >1.0E+10             | ohm*m        | IEC 62631-3-1        |
| Comparative Tracking Index (CTI)                                    | 600                  | V            | IEC 60112            |
| Surface Resistivity                                                 | >1.0E+15             | ohm          | IEC 60093            |
| - Conditioned                                                       | >1.0E+12             | ohm          | IEC 60093            |
| <b>Flammable</b>                                                    |                      |              |                      |
| Burning Rate                                                        |                      |              |                      |
| (2.00 mm)                                                           | 0.0                  | mm/min       | FMVSS 302            |
| (2.00 mm)                                                           | 0.0                  | mm/min       | ISO 3795             |
| Glow Wire Flammability Index                                        |                      |              |                      |
| (1.5 mm)                                                            | 850                  | °C           | IEC 60695-2-12       |
| (3.0 mm)                                                            | 850                  | °C           | IEC 60695-2-12       |
| <b>UL Information</b>                                               |                      |              |                      |
| Flammability Classification                                         |                      |              |                      |
| (1.5 mm)                                                            | V-2                  |              | IEC 60695-11-10, -20 |
| (3.0 mm)                                                            | V-2                  |              | IEC 60695-11-10, -20 |
| UL File Number                                                      | E86615               |              |                      |
| <b>Injection Parameters</b>                                         |                      |              |                      |
|                                                                     | <b>Nominal Value</b> | <b>Units</b> |                      |
| Drying Time                                                         | 3.0 to 4.0           | hr           |                      |
| Drying Temperature                                                  | 80                   | °C           |                      |
| Suggested Max Moisture                                              | 0.040 to 0.10        | %            |                      |
| Processing (Melt) Temp                                              | 250 to 270           | °C           |                      |
| Mold Temperature                                                    | 60 to 90             | °C           |                      |