

# SLOVAMID® 6 FRM1X3

Polyamide 6

Plastcom

## Message:

Determined for electrotechnical use. Delivered in natural mode. PA 6 for injection moulding with reduced flammability, with nonhalogen flame retardant. Excellent fluidity of the material predetermines it for the manufacturing of complicated small and large surface mouldings. Possible use for products with wall thickness from 0.5 mm. High grade brightness also at coloured types. Delivered in the full RAL colour scale.

| General Information                       |                                    |                   |             |
|-------------------------------------------|------------------------------------|-------------------|-------------|
| Additive                                  | Flame Retardant                    |                   |             |
| Features                                  | Flame Retardant                    |                   |             |
|                                           | Halogen Free                       |                   |             |
|                                           | High Gloss                         |                   |             |
|                                           | Medium Rigidity                    |                   |             |
| Uses                                      | Electrical/Electronic Applications |                   |             |
| Appearance                                | Colors Available                   |                   |             |
|                                           | Natural Color                      |                   |             |
| Processing Method                         | Injection Molding                  |                   |             |
| Resin ID (ISO 1043)                       | PA 6                               |                   |             |
| Physical                                  | Nominal Value                      | Unit              | Test Method |
| Density                                   | 1.15                               | g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 10                                 | g/10 min          | ISO 1133    |
| Molding Shrinkage                         |                                    |                   | STM 64 0808 |
| Across Flow                               | 1.1                                | %                 |             |
| Flow                                      | 1.2                                | %                 |             |
| Water Content                             | 0.15                               | %                 | ISO 960     |
| Mechanical                                | Nominal Value                      | Unit              | Test Method |
| Tensile Modulus                           | 3200                               | MPa               | ISO 527-2   |
| Tensile Stress (Yield)                    | 80.0                               | MPa               | ISO 527-2   |
| Tensile Strain (Yield)                    | 3.5                                | %                 | ISO 527-2   |
| Flexural Modulus                          | 2700                               | MPa               | ISO 178     |
| Flexural Stress                           | 105                                | MPa               | ISO 178     |
| Impact                                    | Nominal Value                      | Unit              | Test Method |
| Charpy Notched Impact Strength            |                                    |                   | ISO 179     |
| -20°C                                     | 2.0                                | kJ/m <sup>2</sup> |             |
| 23°C                                      | 2.0                                | kJ/m <sup>2</sup> |             |
| Charpy Unnotched Impact Strength          |                                    |                   | ISO 179     |
| -20°C                                     | 110                                | kJ/m <sup>2</sup> |             |

| 23°C                                               | No Break      |         |                |
|----------------------------------------------------|---------------|---------|----------------|
| Thermal                                            | Nominal Value | Unit    | Test Method    |
| Heat Deflection Temperature (0.45 MPa, Unannealed) | 65.0          | °C      | ISO 75-2/B     |
| Vicat Softening Temperature                        | 200           | °C      | ISO 306/B      |
| Melting Temperature (DSC)                          | 220           | °C      | ISO 3146       |
| Electrical                                         | Nominal Value | Unit    | Test Method    |
| Surface Resistivity                                | 1.0E+12       | ohms    | IEC 60093      |
| Volume Resistivity                                 | 1.0E+13       | ohms·cm | IEC 60093      |
| Electric Strength                                  | 20            | kV/mm   | IEC 60243-1    |
| Comparative Tracking Index                         | 500           | V       | IEC 60112      |
| Flammability                                       | Nominal Value | Unit    | Test Method    |
| Flame Rating                                       |               |         | UL 94          |
| 0.800 mm                                           | V-2           |         |                |
| 1.60 mm                                            | V-2           |         |                |
| 3.20 mm                                            | V-0           |         |                |
| Glow Wire Ignition Temperature                     | 960           | °C      | IEC 60695-2-13 |
| Injection                                          | Nominal Value | Unit    |                |
| Drying Temperature                                 | 80.0          | °C      |                |
| Drying Time                                        | 4.0           | hr      |                |
| Processing (Melt) Temp                             | 250 to 270    | °C      |                |
| Mold Temperature                                   | 50.0 to 70.0  | °C      |                |
| Injection Pressure                                 | 70.0 to 100   | MPa     |                |

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