

Technical Data Sheet

# Schulamid 6 MKF 3010 HI

Polyamide 6  
LyondellBasell Industries  
Engineering Plastics

## Product Description

30% glass fiber and mineral reinforced Polyamide 6 with high impact

## General

|                        |                                              |                                  |  |
|------------------------|----------------------------------------------|----------------------------------|--|
| Filler / Reinforcement | • Glass\Mineral, 30% Filler by Weight        |                                  |  |
| Features               | • Good Toughness<br>• High Impact Resistance | • Low Warpage<br>• Oil Resistant |  |
| Processing Method      | • Injection Molding                          |                                  |  |

| Physical | Dry  | Conditioned | Unit              | Test Method |
|----------|------|-------------|-------------------|-------------|
| Density  | 1.33 | --          | g/cm <sup>3</sup> | ISO 1183/A  |

| Mechanical             | Dry              | Conditioned      | Unit         | Test Method    |
|------------------------|------------------|------------------|--------------|----------------|
| Tensile Modulus        | 653000<br>(4500) | 435000<br>(3000) | psi<br>(MPa) | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 11600<br>(80.0)  | 7250<br>(50.0)   | psi<br>(MPa) | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 6.0              | > 20             | %            | ISO 527-2/1A/5 |

| Impact                                          | Dry          | Conditioned | Unit                                          | Test Method |
|-------------------------------------------------|--------------|-------------|-----------------------------------------------|-------------|
| Charpy Notched Impact Strength (73°F (23°C))    | 2.9<br>(6.0) | 7.6<br>(16) | ft·lb/in <sup>2</sup><br>(kJ/m <sup>2</sup> ) | ISO 179/1eA |
| Charpy Unnotched Impact Strength<br>73°F (23°C) | 21<br>(45)   | 32<br>(68)  | ft·lb/in <sup>2</sup><br>(kJ/m <sup>2</sup> ) | ISO 179/1eU |

| Thermal                           | Dry          | Conditioned | Unit       | Test Method |
|-----------------------------------|--------------|-------------|------------|-------------|
| Deflection Temperature Under Load |              |             |            |             |
| 66 Psi (0.45 Mpa), Unannealed     | 410<br>(210) | --          | °F<br>(°C) | ISO 75-2/Bf |
| 264 Psi (1.8 Mpa), Unannealed     | 338<br>(170) | --          | °F<br>(°C) | ISO 75-2/Af |
| Vicat Softening Temperature       |              |             |            |             |
| --                                | 392<br>(200) | --          | °F<br>(°C) | ISO 306/B50 |
| --                                | 428<br>(220) | --          | °F<br>(°C) | ISO 306/A50 |

| Electrical                 | Dry       | Conditioned | Unit   | Test Method   |
|----------------------------|-----------|-------------|--------|---------------|
| Surface Resistivity        | > 1.0E+15 | > 1.0E+12   | ohms   | IEC 60093     |
| Volume Resistivity         | > 1.0E+13 | > 1.0E+10   | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | 450       | --          | V      | IEC 60112     |

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| Flammability                 | Dry              | Conditioned   | Unit               | Test Method             |
|------------------------------|------------------|---------------|--------------------|-------------------------|
| Burning Rate                 |                  |               |                    |                         |
| 0.0787 In (2.00 Mm)          | < 3.9<br>(< 100) | --            | in/min<br>(mm/min) | ISO 3795                |
| 0.0787 In (2.00 Mm)          | < 3.9<br>(< 100) | --            | in/min<br>(mm/min) | FMVSS 302               |
| Flammability Classification  |                  |               |                    | IEC 60695-11-10,<br>-20 |
| 0.06 In (1.5 Mm)             | HB               | --            |                    |                         |
| 0.12 In (3.0 Mm)             | HB               | --            |                    |                         |
| Glow Wire Flammability Index |                  |               |                    | IEC 60695-2-12          |
| 0.06 In (1.5 Mm)             | --               | 1200<br>(650) | °F<br>(°C)         |                         |
| 0.12 In (3.0 Mm)             | --               | 1200<br>(650) | °F<br>(°C)         |                         |

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| Injection              | Dry (English)  | Dry (SI)       |
|------------------------|----------------|----------------|
| Drying Temperature     | 176 °F         | 80 °C          |
| Drying Time            | 3.0 to 4.0 hr  | 3.0 to 4.0 hr  |
| Suggested Max Moisture | 0.04 to 0.10 % | 0.04 to 0.10 % |
| Processing (Melt) Temp | 482 to 536 °F  | 250 to 280 °C  |
| Mold Temperature       | 140 to 212 °F  | 60 to 100 °C   |

### Notes

These are typical property values not to be construed as specification limits.