

Technical Data Sheet

# Schulamid 66 MK 20 HI

Polyamide 66  
LyondellBasell Industries  
Engineering Plastics

## Product Description

20% mineral filled PA 66, impact modified

## General

|                        |                                 |
|------------------------|---------------------------------|
| Filler / Reinforcement | • Mineral, 20% Filler by Weight |
| Additive               | • Impact Modifier               |
| Features               | • Impact Modified               |
| Processing Method      | • Injection Molding             |

| Physical | Dry  | Conditioned | Unit              | Test Method |
|----------|------|-------------|-------------------|-------------|
| Density  | 1.28 | --          | g/cm <sup>3</sup> | ISO 1183/A  |

| Mechanical             | Dry              | Conditioned      | Unit         | Test Method    |
|------------------------|------------------|------------------|--------------|----------------|
| Tensile Modulus        | 508000<br>(3500) | 290000<br>(2000) | psi<br>(MPa) | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 10200<br>(70.0)  | 6530<br>(45.0)   | psi<br>(MPa) | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 12               | 16               | %            | ISO 527-2/1A/5 |

| Impact                           | Dry                                                  | Conditioned  | Unit                                          | Test Method |
|----------------------------------|------------------------------------------------------|--------------|-----------------------------------------------|-------------|
| Charpy Notched Impact Strength   |                                                      |              |                                               | ISO 179/1eA |
| -22°F (-30°C)                    | 2.9<br>(6.0)                                         | 2.4<br>(5.0) | ft·lb/in <sup>2</sup><br>(kJ/m <sup>2</sup> ) |             |
| 73°F (23°C)                      | 3.8<br>(8.0)                                         | 6.7<br>(14)  | ft·lb/in <sup>2</sup><br>(kJ/m <sup>2</sup> ) |             |
| Charpy Unnotched Impact Strength |                                                      |              |                                               | ISO 179/1eU |
| -22°F (-30°C)                    | 57<br>(120)                                          | 81<br>(170)  | ft·lb/in <sup>2</sup><br>(kJ/m <sup>2</sup> ) |             |
| 73°F (23°C)                      | 59 ft·lb/in <sup>2</sup><br>(130 kJ/m <sup>2</sup> ) | No Break     | (kJ/m <sup>2</sup> )                          |             |

| Hardness                             | Dry            | Conditioned | Unit         | Test Method |
|--------------------------------------|----------------|-------------|--------------|-------------|
| Ball Indentation Hardness (H 358/30) | 24700<br>(170) | --          | psi<br>(MPa) | ISO 2039-1  |

| Thermal                            | Dry           | Conditioned | Unit       | Test Method    |
|------------------------------------|---------------|-------------|------------|----------------|
| Deflection Temperature Under Load  |               |             |            |                |
| 66 Psi (0.45 Mpa), Unannealed      | 338<br>(170)  | --          | °F<br>(°C) | ISO 75-2/Bf    |
| 264 Psi (1.8 Mpa), Unannealed      | 194<br>(90.0) | --          | °F<br>(°C) | ISO 75-2/Af    |
| Ball Pressure Test (212°F (100°C)) | Pass          | --          |            | IEC 60695-10-2 |

| Electrical                 | Dry       | Conditioned | Unit   | Test Method   |
|----------------------------|-----------|-------------|--------|---------------|
| Surface Resistivity        | > 1.0E+15 | --          | ohms   | IEC 60093     |
| Volume Resistivity         | > 1.0E+13 | 1.0E+10     | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | 550       | --          | 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 |
| 0.13 In (3.2 Mm)            | HB               | --          |                    |                         |

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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 | 536 to 572 °F  | 280 to 300 °C  |
| Mold Temperature       | 140 to 248 °F  | 60 to 120 °C   |

### Notes

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