

## Technical Data Sheet



# Hostacom FPP 30 GFC K1041

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

### Product Description

30% glass fiber reinforced PP-Homopolymer chemically coupled

Former name: Polyfort FPP 30 GFC K1041

### General

|                        |                                     |
|------------------------|-------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features               | • Chemically Coupled • Homopolymer  |
| UL File Number         | • E86615                            |
| Processing Method      | • Injection Molding                 |

| Physical                                    | Nominal Value (English)    | Nominal Value (SI)         | Test Method |
|---------------------------------------------|----------------------------|----------------------------|-------------|
| Density                                     | 1.12 g/cm <sup>3</sup>     | 1.12 g/cm <sup>3</sup>     | ISO 1183/A  |
| Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg) | 6.0 cm <sup>3</sup> /10min | 6.0 cm <sup>3</sup> /10min | ISO 1133    |

| Mechanical                    | Nominal Value (English) | Nominal Value (SI) | Test Method    |
|-------------------------------|-------------------------|--------------------|----------------|
| Tensile Modulus               | 957000 psi              | 6600 MPa           | ISO 527-1/1A/1 |
| Tensile Stress (Break)        | 13100 psi               | 90.0 MPa           | ISO 527-2/1A/5 |
| Tensile Strain (Break)        | 3.3 %                   | 3.3 %              | ISO 527-2/1A/5 |
| Flexural Modulus <sup>1</sup> | 957000 psi              | 6600 MPa           | ISO 178        |
| Flexural Stress <sup>1</sup>  |                         |                    | ISO 178        |
| 3.4% Strain                   | 20300 psi               | 140 MPa            |                |
| 3.6% Strain <sup>2</sup>      | 20300 psi               | 140 MPa            |                |

| Impact                           | Nominal Value (English)   | Nominal Value (SI)    | Test Method |
|----------------------------------|---------------------------|-----------------------|-------------|
| Charpy Notched Impact Strength   |                           |                       | ISO 179/1eA |
| -22°F (-30°C)                    | 4.3 ft·lb/in <sup>2</sup> | 9.0 kJ/m <sup>2</sup> |             |
| 73°F (23°C)                      | 5.2 ft·lb/in <sup>2</sup> | 11 kJ/m <sup>2</sup>  |             |
| Charpy Unnotched Impact Strength |                           |                       | ISO 179/1eU |
| -22°F (-30°C)                    | 24 ft·lb/in <sup>2</sup>  | 50 kJ/m <sup>2</sup>  |             |
| 73°F (23°C)                      | 28 ft·lb/in <sup>2</sup>  | 58 kJ/m <sup>2</sup>  |             |

| Hardness                             | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------------|-------------------------|--------------------|-------------|
| Ball Indentation Hardness (H 358/30) | 17400 psi               | 120 MPa            | ISO 2039-1  |

| Thermal                            | Nominal Value (English) | Nominal Value (SI) | Test Method    |
|------------------------------------|-------------------------|--------------------|----------------|
| Deflection Temperature Under Load  |                         |                    |                |
| 66 Psi (0.45 Mpa), Unannealed      | 311 °F                  | 155 °C             | ISO 75-2/Bf    |
| 264 Psi (1.8 Mpa), Unannealed      | 284 °F                  | 140 °C             | ISO 75-2/Af    |
| Vicat Softening Temperature        |                         |                    |                |
| --                                 | 271 °F                  | 133 °C             | ISO 306/B50    |
| --                                 | 316 °F                  | 158 °C             | ISO 306/A50    |
| Ball Pressure Test (293°F (145°C)) | Pass                    | Pass               | IEC 60695-10-2 |

| Electrical          | Nominal Value (English) | Nominal Value (SI) | Test Method   |
|---------------------|-------------------------|--------------------|---------------|
| Surface Resistivity | > 1.0E+15 ohms          | > 1.0E+15 ohms     | IEC 60093     |
| Volume Resistivity  | > 1.0E+13 ohms·m        | > 1.0E+13 ohms·m   | IEC 62631-3-1 |

Technical Data Sheet

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| Flammability                   | Nominal Value (English) | Nominal Value (SI) | Test Method          |
|--------------------------------|-------------------------|--------------------|----------------------|
| Burning Rate                   |                         |                    |                      |
| 0.0787 In (2.00 Mm)            | 2.3 in/min              | 58 mm/min          | ISO 3795             |
| 0.0787 In (2.00 Mm)            | 2.3 in/min              | 58 mm/min          | FMVSS 302            |
| Flammability Classification    |                         |                    | IEC 60695-11-10, -20 |
| 0.06 In (1.5 Mm)               | HB                      | HB                 |                      |
| 0.12 In (3.0 Mm)               | HB                      | HB                 |                      |
| Glow Wire Flammability Index   |                         |                    | IEC 60695-2-12       |
| 0.06 In (1.5 Mm)               | 1430 °F                 | 775 °C             |                      |
| 0.12 In (3.0 Mm)               | 1430 °F                 | 775 °C             |                      |
| Glow Wire Ignition Temperature |                         |                    | IEC 60695-2-13       |
| 0.06 In (1.5 Mm)               | 1470 °F                 | 800 °C             |                      |
| 0.12 In (3.0 Mm)               | 1470 °F                 | 800 °C             |                      |

### Additional Information

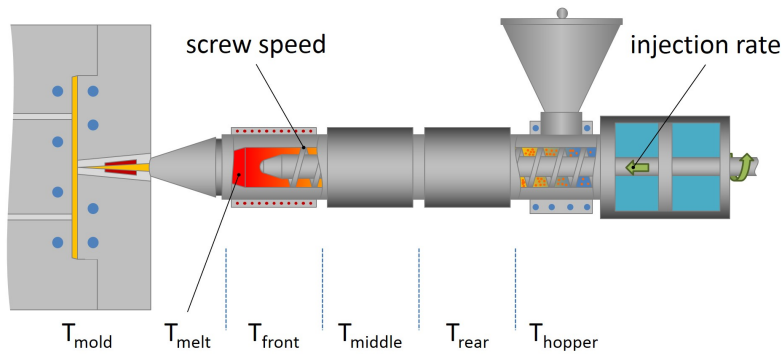
- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

Simulaton data (also for Crash simulation) is available on special request

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 176 °F                  | 80 °C              |
| Drying Time            | 2.0 to 3.0 hr           | 2.0 to 3.0 hr      |
| Processing (Melt) Temp | 428 to 500 °F           | 220 to 260 °C      |
| Mold Temperature       | 86 to 140 °F            | 30 to 60 °C        |
| Injection Rate         | Moderate-Fast           | Moderate-Fast      |

### Injection Notes

Polypropylene is not hygroscopic and generally does not require drying. As a good practice and to avoid residual humidity from transport or storage conditions, we recommend drying the material.

Ensure good mold venting

Injection molding parameters also influence emission properties, which are often required for automotive interior applications. Generally speaking, the emission, odor and fogging behavior of finished parts is improved by lowering the melt temperature, reducing residence time and avoiding high shear stress.

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**Notes**

<sup>1</sup> 0.079 in/min (2.0 mm/min)

<sup>2</sup> at Break

**Notes**

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