# SABIC® PP FPH50

Polypropylene Homopolymer

Saudi Basic Industries Corporation (SABIC)

## Message:

SABIC® PP FPH50 is a grade developed for thin wall packaging as well as the caps & closures market. The grade is nucleated and is characterised by a high crystallisation temperature, excellent flow behaviour in combination with a high stiffness. SABIC® PP FPH50 allows for very cost efficient processing on the basis of easy mould filling, very short cycle times and robust processing behaviour in combination with pigments. It has a very good antistatic performance and shows easy demoulding.
SABIC® PP FPH50 is typically used in thin wall packing applications both for food and non-food segments. In caps and closure, the grade could be used for wide mouth caps, amongst others. In media packaging, the grade offers opportunities for cycle time optimisation. The grade has excellent heat deflection temperature making it particularly suitable for hot fill applications.
This product is not intended for and must not be used in any pharmaceutical/medical applications.

| General Information | | | |
|---|---|---|---|
| UL YellowCard | E111275-100605366 | | |
| Additive | Antistatic<br>Nucleating Agent | | |
| Features | Antistatic<br>Fast Molding Cycle<br>Good Flow<br>Good Mold Release<br>High Stiffness<br>Homopolymer<br>Nucleated | | |
| Uses | Caps<br>Closures<br>Food Packaging<br>Media Packaging<br>Packaging<br>Thin-walled Packaging | | |
| UL File Number | E111275 | | |
| Forms | Pellets | | |
| Processing Method | Injection Molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 0.905 | $g/cm^3$ | ASTM D792, ISO 1183 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 50 | g/10 min | ASTM D1238, ISO 1133 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 114 | | ASTM D785 |
| Shore Hardness (Shore D) | 71 | | ISO 868 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Modulus | | | |
| 1% Secant [1] | 2100 | MPa | ASTM D638 |
| -- | 2050 | MPa | ISO 527-2/1A/1 |
| Tensile Strength | | | |
| Yield [2] | 40.0 | MPa | ASTM D638 |
| Yield | 39.0 | MPa | ISO 527-2/1A/50 |
| Tensile Elongation | | | |
| Yield [3] | 7.0 | % | ASTM D638 |
| Yield | 7.0 | % | ISO 527-2/1A/50 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength (23°C) | 3.0 | $kJ/m^2$ | ISO 179/1eA |
| Notched Izod Impact | | | |
| 23°C | 25 | J/m | ASTM D256A |
| 23°C | 2.5 | $kJ/m^2$ | ISO 180/1A |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load | | | |
| 0.45 MPa, Unannealed | 110 | °C | ASTM D648 |
| 0.45 MPa, Unannealed [4] | 105 | °C | ISO 75-2/Bf |
| 1.8 MPa, Unannealed | 65.0 | °C | ASTM D648 |
| 1.8 MPa, Unannealed [5] | 60.0 | °C | ISO 75-2/Af |
| Vicat Softening Temperature | | | |
| -- | 154 | °C | ASTM D1525, ISO 306/A120 6 [6] |
| -- | 103 | °C | ASTM D1525, ISO 306/B120 7 [7] |

| NOTE | |
|---|---|
| 1. | 1.0 mm/min |
| 2. | 50 mm/min |
| 3. | 50 mm/min |
| 4. | testbar 80*10*4mm |
| 5. | testbar 80*10*4mm |
| 6. | Rate B (120°C/h), Loading 1 (10 N) |
| 7. | Rate B (120°C/h), Loading 2 (50 N) |



Recommended distributors for this material

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