

SABIC® PP FPH50

PP HOMOPOLYMER FLOWPACT

DESCRIPTION

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 shortcycle times and robust processing behaviour in combination with pigments. It has a very good antistatic performance and shows easy demoulding.

Application:

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 be used for hot fill applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	50	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
Anti static agent	☑	-	-
Nucleating agent	☑	-	-
MECHANICAL PROPERTIES			
Tensile test			
tensile modulus ⁽¹⁾	2050	MPa	ISO 527-2 1A
stress at yield ⁽²⁾	39	MPa	ISO 527-2 1A
strain at yield	7	%	ISO 527-2 1A
Izod impact notched			
at 23 °C	2.5	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at 23 °C	3.0	kJ/m²	ISO 179/1eA
Hardness Shore D	71	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature ⁽³⁾			
at 0.45 MPa (HDT/B)	105	°C	ISO 75
at 1.80 MPa (HDT/A)	60	°C	ISO 75
Vicat Softening Temperature ⁽⁴⁾			
at 10 N (VST/A)	154	°C	ISO 306
at 50 N (VST/B)	103	°C	ISO 306

(1) Speed of testing: 1 mm/min

(2) Speed of testing: 50 mm/min

(3) Flat wise (testbar 80*10*4mm)

(4) Temperature rate: 120°C/h

