



SABIC® PP FPC45

PP IMPACT COPOLYMER FLOWPACT

DESCRIPTION

This grade has been developed as a new member of the SABIC® PP FLOWPACT range dedicated to the rigid packaging market. It delivers a high top load performance (potential downgauging) with a superior stiffness / impact balance. It is nucleated and is characterized by a high crystallization temperature and excellent flow behavior. This grade is typically used by our customers for high-speed injection moulding and it enables very cost efficient processing on the basis of easy mould filling and very short cycle times. It has a very good antistatic performance with easy demoulding. Application: This material is typically used in rigid packaging applications for both food and non-food industries. This includes packaging for yellow fats, cheese spreads, dairy, frozen, chilled and ambient food, household chemicals, paints among others. It can be also used in several applications in the caps & closures industry as well in housewares. The grade has excellent heat deflection temperature making it may particularly be used for hot fill applications. Health, Safety and

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230 °C and 2.16 kg	45	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
Anti static agent	☑	-	-
Nucleating agent	☑	-	-
MECHANICAL PROPERTIES			
Tensile test			
tensile modulus ⁽¹⁾	1700	MPa	ISO 527-2 1A
strain at yield	4	%	ISO 527-2 1A
stress at yield ⁽²⁾	30	MPa	ISO 527-2 1A
Izod impact notched			
at -20 °C	3.5	kJ/m²	ISO 180/1A
at 0 °C	4.5	kJ/m²	ISO 180/1A
at 23 °C	7	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at 23 °C	7.5	kJ/m²	ISO 179/1eA
at 0 °C	5.5	kJ/m²	ISO 179/1eA
at -20 °C	3.5	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES			
Heat deflection temperature ⁽³⁾			
at 0.45 MPa (HDT/B)	100	°C	ISO 75
at 1.80 MPa (HDT/A)	60	°C	ISO 75
Vicat Softening Temperature ⁽⁴⁾			
at 10 N (VST/A)	150	°C	ISO 306
at 50 N (VST/B)	80	°C	ISO 306