

SABIC® HP20023

HP20023 is an additive free low density polyethylene grade with high melt flow, offering good processability and capability to accept high pigment loading during compounding.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.923 g/cc	0.0333 lb/in ³	ASTM D1505
ESCR 100% Igepal®	6.0 hour	6.0 hour	F50; ASTM D1693B
ESCR 10% Igepal®	2.0 hour	2.0 hour	F50; ASTM D1693B
Melt Flow	20 g/10 min @Load 2.16 kg, Temperature 190 °C	20 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	45	45	ISO 868
Tensile Strength at Break	9.00 MPa	1310 psi	Based on injection molded specimens.; ASTM D638
Tensile Strength, Yield	8.00 MPa	1160 psi	Based on injection molded specimens.; ASTM D638
Elongation at Break	150 %	150 %	Based on injection molded specimens.; ASTM D638
Flexural Strength	7.00 MPa	1020 psi	ASTM D790
Flexural Modulus	0.175 GPa	25.4 ksi	ASTM D790
1% Secant Modulus	225 MPa	32600 psi	Based on injection molded specimens.; ASTM D638
Izod Impact, Notched	5.00 J/cm	9.37 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	112 °C	234 °F	Peak Melting Temperature; SABIC method
Crystallization Temperature	98.0 °C	208 °F	ISO 11357-3
Vicat Softening Point	92.0 °C	198 °F	ASTM D1525