SABIC® PPcompound 15T1040

PP — Saudi Basic Industries Corporation (SABIC)

Product Texts

SABIC® PPcompound 15T1040 is a 40% talc-filled polypropylene homopolymer. The materials high fill grade makes for a very high stiffness. This combined with the good thermal stabilization makes it especially suited for applications requiring a very high modulus and high thermal stability. SABIC® PPcompound 15T1040 is a designated automotive grade. IMDS ID: 1648799

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**5520**	MPa	ISO 527
Yield stress	**36**	MPa	ISO 527
Yield strain	**2.1**	%	ISO 527
Stress at break	**26**	MPa	ISO 527
Strain at break	**17**	%	ISO 527
Flexural modulus, 23°C	**3500**	MPa	ISO 178
Charpy notched impact strength, +23°C	**2**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**1**	kJ/m²	ISO 179/1eA
Izod notched impact strength	**1.4**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**4240**	MPa	ASTM D 638
Tensile Strength at Yield	**33**	MPa	ASTM D 638
Tensile Strength at Break	**28**	MPa	ASTM D 638
Elongation at Yield	**2.9**	%	ASTM D 638
Elongation at Break	**8.4**	%	ASTM D 638
Flexural Modulus	**3750**	MPa	ASTM D 790
Shore D Hardness	**75**	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**88**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**130**	°C	ISO 75-1/-2
Vicat softening temperature, A	**158**	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	**137**	°C	ASTM D 648
DTUL @ 264 psi	**82**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	**1250**	kg/m³	ISO 1183
Density	**1260**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80 - 100**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Melt temperature	**210 - 270**	°C	-
Mold temperature	**15 - 60**	°C	-
Zone 1	**190 - 230**	°C	-
Zone 2	**200 - 250**	°C	-
Zone 3	**210 - 270**	°C	-
Nozzle temperature	**210 - 270**	°C	-
Back pressure	**1 - 1.5**	MPa	-

Characteristics

Features

Homopolymer