

Product Texts

SABIC® PPcompound 15T1020 is a 20% talc-filled polypropylene homopolymer. The material's high modulus and good thermal stabilization makes it suited for applications under the bonnet such as heating, ventilation and air conditioning housings. SABIC® PPcompound 15T1020 is a designated automotive grade. IMDS ID: 16486973

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	37	MPa	ISO 527
Yield strain	4.9	%	ISO 527
Stress at break	29	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus, 23°C	2700	MPa	ISO 178
Charpy notched impact strength, +23°C	3	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	1	kJ/m ²	ISO 179/1eA
Izod notched impact strength	2.2	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2710	MPa	ASTM D 638
Tensile Strength at Yield	35	MPa	ASTM D 638
Tensile Strength at Break	18	MPa	ASTM D 638
Elongation at Yield	5.5	%	ASTM D 638
Elongation at Break	25.6	%	ASTM D 638
Flexural Modulus	2700	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	73	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	120	°C	ISO 75-1/-2
Vicat softening temperature, A	150	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	125	°C	ASTM D 648
DTUL @ 264 psi	68	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1040	kg/m ³	ISO 1183
Density	1060	kg/m ³	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