

SABIC® PPcompound 19T1020

PP

Saudi Basic Industries Corporation (SABIC)

Product Texts

SABIC® PPcompound 19T1020 is a general purpose, talc filled, heat stabilized homopolymer polypropylene compound. This compound exhibits high flow and is suitable for injection molding applications. IMDS ID: 163255030

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	18	g/10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3200	MPa	ISO 527
Yield stress	36	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Stress at break	32	MPa	ISO 527
Strain at break	10.6	%	ISO 527
Flexural modulus, 23°C	3170	MPa	ISO 178
Charpy notched impact strength, +23°C	2	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	1	kJ/m ²	ISO 179/1eA
Izod notched impact strength	1	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2970	MPa	ASTM D 638
Tensile Strength at Yield	36	MPa	ASTM D 638
Tensile Strength at Break	29	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	20.5	%	ASTM D 638
Flexural Modulus	2490	MPa	ASTM D 790
Shore D Hardness	74	-	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	128	°C	ISO 75-1/-2
Vicat softening temperature, A	157	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	129	°C	ASTM D 648
DTUL @ 264 psi	73	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1050	kg/m ³	ISO 1183
Density	1050	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

Processing

Injection Molding

Features

Homopolymer

Special Characteristics

Heat stabilized or stable to heat