

PRODUCT CODE	TİSOPLEN C 20D11 R02
PRODUCT DESCRIPTION	PPH, 20% CARBON FIBER REINFORCED, BLACK

PHYSICAL	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	DENSITY	-	ISO 1183	g/cm ³	0.99-1.01
	MOLDING SHRINKAGE	PARALLEL/NORMAL	ISO 294-4	%	-
	MOISTURE CONTENT	-	ISO 15512	%	-

MECHANICAL	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	YIELD STRENGTH	+23°C	ISO 527-2	MPa	-
	TENSILE STRESS AT BREAK	+23°C	ISO 527-2	MPa	50-60
	TENSILE STRAIN AT BREAK	+23°C	ISO 527-2	%	-
	TENSILE MODULUS	+23°C	ISO 527-2	MPa	8500-9500
	IZOD IMPACT STRENGTH, NOTCHED	+23°C	ISO 180/A	kJ/m ²	3-4
	IZOD IMPACT STRENGTH, NOTCHED	-30°C	ISO 180/A	kJ/m ²	-
	IZOD IMPACT STRENGTH, UNNOTCHED	+23°C	ISO 180/U	kJ/m ²	-
	IZOD IMPACT STRENGTH, UNNOTCHED	-30°C	ISO 180/U	kJ/m ²	-

THERMAL	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	VICAT SOFTENING TEMPERATURE	50 N	ISO 306	°C	-
	HEAT DEFLECTION TEMPERATURE	0,45 MPa	ISO 75	°C	-
	HEAT DEFLECTION TEMPERATURE	1,80 MPa	ISO 75	°C	-
	MELTING TEMPERATURE	10 K/min	ISO 11357	°C	165-170
BALL PRESSURE TEST	120 °C	ISO 60695-10-2	-	-	

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ELECTRICAL & FLAMMABILITY	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	FLAME RATING	0,75 mm	UL 94	-	HB
	FLAME RATING	1,6 mm	UL 94	-	HB
	GLOW WIRE FLAMMABILITY INDEX	2 mm	IEC 60695	°C	-
	GLOW WIRE IGNITABILITY TEMPERATURE	2 mm	IEC 60695	°C	-
	COMPARATIVE TRACKING INDEX	Solution A	ISO 60112	Volt	-
	VOLUME RESISTIVITY	-	IEC 60093	Ohm.cm	1E+15
	SURFACE RESISTIVITY	-	IEC 60093	Ohm	1E+15

INJECTION PROCESS	PROPERTIES	CONDITION	VALUE
	PREDRYING TEMPERATURE	°C	80
	PREDRYING TIME	hours	1-2
	MELTING TEMPERATURE	°C	210-230
	NOZZLE TEMPERATURE	°C	230
	PRE- 3 REGION TEMPERATURE	°C	200-240
	MID-2 REGION TEMPERATURE	°C	200-240
	AFT-1 REGION TEMPERATURE	°C	150-180
	MOLD TEMPERATURE	°C	40-70
	HOLD PRESSURE	MPa	50-100

Data are based on dry conditions

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