

PRODUCT CODE	TISOPLEN D 15D01 F01 K02 HS R01
PRODUCT DESCRIPTION	PPC, 15% TALC FILLED, FLAME RETARDANT-HALOGEN (RoHS COMPLIANCE), HEAT STABILIZED, NATURAL

PHYSICAL	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	DENSITY	-	ISO 1183	g/cm ³	1.08-1.11
	MOLDING SHRINKAGE	PARALLEL/NORMAL	ISO 294-4	%	-
	MOISTURE CONTENT	-	ISO 15512	%	<0.1

MECHANICAL	PROPERTIES	CONDITION	STANDARD	UNITS	VALUE
	YIELD STRENGTH	+23°C	ISO 527-2	MPa	25-35
	TENSILE STRESS AT BREAK	+23°C	ISO 527-2	MPa	-
	TENSILE STRAIN AT BREAK	+23°C	ISO 527-2	%	>10
	TENSILE MODULUS	+23°C	ISO 527-2	MPa	1500-2500
	IZOD IMPACT STRENGTH, NOTCHED	+23°C	ISO 180/A	kJ/m ²	5-8
	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	60
	MELTING TEMPERATURE	10 K/min	ISO 11357	°C	160-165
BALL PRESSURE TEST	120 °C	ISO 60695-10-2	-	-	

PRODUCT CODE	TISOPLEN D 15D01 F01 K02 HS R01
PRODUCT DESCRIPTION	PPC, 15% TALC FILLED, FLAME RETARDANT-HALOGEN (RoHS COMPLIANCE), HEAT STABILIZED, NATURAL

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	650
	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

To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. Any values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design. Colorants or other additives may cause significant variations in data values. Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. It is the sole responsibility of the users investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Call Customer Services for the appropriate Material Safety Data Sheets (MSDS) before attempting to process our products.