

RITFLEX® 430 - TPC

Description

Riteflex 430 is a nominal 30 Shore D thermoplastic polyester elastomer with low modulus and outstanding low temperature impact and tear resistance.

Physical properties	Value	Unit	Test Standard
Density	1070	kg/m ³	ISO 1183
Melt flow rate, MFR	15	g/10min	ISO 1133
MFR temperature	230	°C	ISO 1133
MFR load	2.16	kg	ISO 1133
Water absorption, 23°C-sat	0.7	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile nominal strain at break, 50mm/min	800	%	ISO 527-2/1A
Tensile stress at break, 50mm/min	20	MPa	ISO 527-2/1A
Flexural modulus, 23°C	25	MPa	ISO 178
Charpy impact strength, 23°C	NB	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	NB	kJ/m ²	ISO 179/1eA
Izod impact notched, 23°C	NB	kJ/m ²	ISO 180/1A
Izod impact unnotched, 23°C	NB	kJ/m ²	ISO 180/1U
Bayshore resilience	65	%	ASTM D 2632

Mechanical properties (TPE)	Value	Unit	Test Standard
Shore A hardness, 15s	80	-	ISO 868
Shore D hardness, 15s	30	-	ISO 868
Tear strength, Die C/parallel	75	kN/m	ISO 34-1
Tear strength	75	kN/m	ISO 34-1

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	170	°C	ISO 11357-1/-3

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.05	%	-
Drying time	4	h	-
Drying temperature	100 - 110	°C	-

Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 50	°C	-
Feeding zone temperature	155 - 170	°C	-
Zone1 temperature	155 - 170	°C	-
Zone2 temperature	170 - 180	°C	-
Zone3 temperature	170 - 180	°C	-
Zone4 temperature	170 - 180	°C	-
Nozzle temperature	170 - 190	°C	-
Melt temperature	170 - 190	°C	-
Mold temperature	20 - 55	°C	-
Hot runner temperature	170 - 190	°C	-

Speed	Value	Unit	Test Standard
Injection speed	medium-fast	-	-

Other text information

Pre-drying

To avoid hydrolytic degradation during processing, Riteflex resins have to be dried to a moisture level equal to or less than 0.05%. Drying should

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be done in a dehumidifying hopper dryer capable of dewpoints <-40°F (-40°C) at 225°F (107°C) for 4 hours.

Longer pre-drying times/storage

For subsequent storage of the material in the dryer until processed (<= 60 h) it is necessary to lower the temperature to 100° C.

Characteristics

Product Categories

Unfilled

Delivery Form

Pellets

Processing

Coating, Film extrusion, Injection molding, Other extrusion, Sheet