RITEFLEX® 655HS | TPC | Unfilled

Description

55 Shore D Hardness heat stabilized

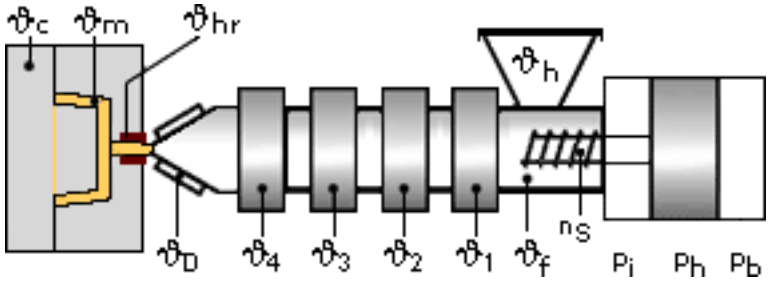
Physical properties	Value	Unit	Test Standard
Density	**1190**	kg/m³	ISO 1183
Melt flow rate (MFR)	**9**	g/10 min	ISO 1133
MFR test temperature	**220**	°C	ISO 1133
MFR test load	**2.16**	kg	ISO 1133
Mold shrinkage - parallel	**1.6-1.9**	%	ISO 294-4
Mold shrinkage - normal	**1.7-2.1**	%	ISO 294-4

Mechanical properties	Value	Unit	Test Standard
Flexural modulus (23°C)	**205**	MPa	ISO 178
Flexural stress @ 3.5% strain	**7**	MPa	ISO 178
Charpy impact strength @ 23°C	**NB**	kJ/m²	ISO 179/1eU
Charpy notched impact strength @ 23°C	**65.0P**	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL @ 1.8 MPa	**45**	°C	ISO 75-1/-2
DTUL @ 0.45 MPa	**75**	°C	ISO 75-1/-2

Electrical properties	Value	Unit	Test Standard
Relative permittivity - 1 MHz	**4**	-	IEC 60250
Dissipation factor - 1 MHz	**400**	E-4	IEC 60250
Volume resistivity	**2E13**	Ohm*m	IEC 60093
Electric strength	**14**	kV/mm	IEC 60243-1
Comparative tracking index CTI	**>600**	-	IEC 60112

Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.05%

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

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

Drying time: 4 h

Drying temperature: 100 - 110 °C

Temperature:

	Manifold	Mold	Melt	Nozzle	Zone4	Zone3	Zone2	Zone1	Feed	Hopper
min (°C)	205	20	205	205	205	205	205	200	200	20
max (°C)	235	55	235	235	235	230	230	215	215	50

Speed:

Injection speed: medium-fast

Injection Molding

Rear Temperature	390-420(200-215)	deg F (deg C)
Center Temperature	420-450(215-230)	deg F (deg C)
Front Temperature	420-460(215-235)	deg F (deg C)
Nozzle Temperature	420-460(215-235)	deg F (deg C)
Melt Temperature	430-460(220-235)	deg F (deg C)
Mold Temperature	75-125(20-55)	deg F (deg C)
Back Pressure	0-50	psi
Screw Speed	Medium	
Injection Speed	Fast	

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.

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General Disclaimer

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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.
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