RTP 283 TFE 10 HS

Polyamide 66

RTP Company

Message:

Warning: The status of this material is 'Commercial: Limited Issue'
The data for this material has not been recently verified.
Please contact RTP Company for current information prior to specifying this grade.
RTP 283 TFE 10 is a 6/6 nylon reinforced with 20% PAN carbon fiber and 10% PTFE. It is characterized by excellent physical properties, wear resistance, and static dissipation capability.

General Information			
Filler / Reinforcement	Carbon fiber reinforced material, 20% filler by weight		
Additive	PTFE lubricant (10%) heat stabilizer		
Features	Antistatic property Good wear resistance Thermal Stability Lubrication		
RoHS Compliance	Contact manufacturer		
Appearance	Black		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.29	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.20	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.50	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	120		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	14500	MPa	ASTM D638
Tensile Strength	193	MPa	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	12400	MPa	ASTM D790
Flexural Strength	276	MPa	ASTM D790
Compressive Strength	124	MPa	ASTM D695
Coefficient of Friction (With Metal-Dynamic)	0.15		ASTM D1894
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	80	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	480	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	260	°C	ASTM D648
1.8 MPa, not annealed	249	°C	ASTM D648
CLTE - Flow	2.2E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.65	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+2	ohms·cm	ASTM D257
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.59 mm)	HB		UL 94

Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 4mil/in.Tensile Elongation, ASTM D-638: 2-3%Wear Factor, K, ASTM D-3702: 30E-10in^3/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.15The wear factor and dynamic coefficient of friction were both tested on a Falex Model No.6 Wear Testing Machine at 50 FPM, 2000 PV, against C1018 steel of hardness 15-25 Rockwell C, 14-17 micro smoothness.

Injection	Nominal Value	Unit
Drying Temperature	79.4	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Suggested Max Regrind	20	%
Rear Temperature	274 - 288	°C
Middle Temperature	274 - 288	°C
Front Temperature	274 - 288	°C
Mold Temperature	65.6 - 107	°C
Injection Pressure	68.9 - 138	MPa

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China