# RTP 2185 TFE 13 SI 2

### Polyether Imide

### **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.

-Preliminary Product Data per RTP Co.-

General Information			
Filler / Reinforcement	Carbon fiber reinforced material, 30% filler by weight		
Additive	PTFE lubricant (13%)		
	Silicone lubricant (2%)		
Features	Lubrication		
RoHS Compliance	Contact manufacturer		
Appearance	Black		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.39	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.10	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	21400	MPa	ASTM D638
Tensile Strength	179	MPa	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	15900	MPa	ASTM D790
Flexural Strength	276	MPa	ASTM D790
Coefficient of Friction (With Metal-Dynamic)	0.14		ASTM D1894
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	64	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	530	J/m	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	213	°C	ASTM D648
1.8 MPa, not annealed	210	°C	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	3.0E+2	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method

Flame Rating V-0 UL 94

#### Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 2mil/in.Tensile Elongation, ASTM D-638: 1-2%Wear Factor, K, ASTM D-3702: 35E-10in³/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.14The wear factor and 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	149	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Suggested Max Regrind	20	%
Rear Temperature	316 - 399	°C
Middle Temperature	316 - 399	°C
Front Temperature	316 - 399	°C
Mold Temperature	93.3 - 177	°C
Injection Pressure	103 - 207	MPa
Back Pressure	0.345 - 0.517	MPa
Clamp Tonnage	6.9 - 11	kN/cm²

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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

