RTP 200D TFE 20 SI 2.5

Polyamide 612

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.-

Additive PTFE lubricant (20%) Features Lubrication RoHS Compliance Contact manufacturer Appearance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.19 g/cm³ ASTM D792 Molding Shrinkage - Flow (3.18 mm) 1.1 % ASTM D570 Water Absorption (23°C, 24 hr) 0.30 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 STM D785 ASTM D785 Mechanical Nominal Value Unit Test Method Tensile Modulus 1860 MPa ASTM D638 Tensile Strength 48.3 MPa ASTM D638 Tensile Longation (Break) 9.5 % ASTM D638 Flexural Strength 62.1 MPa ASTM D698 Illexural Induduus 1720 MPa AST	General Information			
Features Lubrication ROHS Compliance Contact manufacturer Appearance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.19 % ASTM D792 Molding Shrinkage - Flow (3.18 mm) 1.1 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D78 Mechanical Nominal Value Unit Test Method Tensile Modulus 1860 MPa ASTM D638 Tensile Elongation (Break) 9.5 % ASTM D638 Tensile Elongation (Break) 9.5 % ASTM D638 Tensile Strength 62.1 MPa ASTM D638	Additive	PTFE lubricant (20%)		
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RoHS Compilance Contact manufacturer Appearance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.19 g/cm³ ASTM D792 Molding Shrinkage - Flow (3.18 mm) 1.1 % ASTM D955 Water Absorption (23°C, 24 hr) 0.30 % ASTM D792 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 XSTM D785 Mechanical Nominal Value Unit Test Method Tensile Hongation (Resk) 9.5 % ASTM D638 Tensile Elongation (Reak) 9.5 % ASTM D638 Flexural Modulus 1720 MPa ASTM D790 Elevaral Strength 62.1 MPa ASTM D638 Flexural Strength 62.1 MPa ASTM D695 Impact Nominal Value Unit Test Method Compressive Strength 53	Features	Lubrication		
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Physical Nominal Value Unit Test Method Specific Gravity 1.19 g/cm³ ASTM D792 Molding Shrinkage - Flow (3.18 mm) 1.1 % ASTM D955 Water Absorption (23°C, 24 hr) 0.30 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 Mechanical Nominal Value Unit Test Method Tensile Modulus 1860 MPa ASTM D638 Tensile Strength 48.3 MPa ASTM D638 Tensile Elongation (Break) 9.5 % ASTM D638 Flexural Modulus 1720 MPa ASTM D790 Flexural Strength 62.1 MPa ASTM D790 Compressive Strength 27.6 MPa ASTM D695 Impact Nominal Value Unit Test Method Notched Izod Impact (6.35 mm) 33 J/m ASTM D4812 Thermal Nominal Value Unit Test Method	Forms	Particle		
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Water Absorption (23°C, 24 hr) 0.30 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 Mechanical Nominal Value Unit Test Method Tensile Modulus 1860 MPa ASTM D638 Tensile Strength 48.3 MPa ASTM D638 Tensile Elongation (Break) 9.5 % ASTM D638 Flexural Modulus 1720 MPa ASTM D790 Flexural Strength 62.1 MPa ASTM D790 Compressive Strength 27.6 MPa ASTM D695 Impact Nominal Value Unit Test Method Notched Izod Impact (6.35 mm) 53 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load "C ASTM D648 0.45 MPa, not annealed 204 "C ASTM D648 1.8 MPa, not annealed 93.3 "C ASTM D648	Specific Gravity	1.19	g/cm³	ASTM D792
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Compressive Strength27.6MPaASTM D695ImpactNominal ValueUnitTest MethodNotched Izod Impact (6.35 mm)53J/mASTM D256Unnotched Izod Impact (6.35 mm)430J/mASTM D4812ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load0.45 MPa, not annealed204°CASTM D6481.8 MPa, not annealed93.3°CASTM D648	Flexural Modulus	1720	MPa	ASTM D790
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ThermalNominal ValueUnitTest MethodDeflection Temperature Under LoadASTM D6480.45 MPa, not annealed204°CASTM D6481.8 MPa, not annealed93.3°CASTM D648	Notched Izod Impact (6.35 mm)	53	J/m	ASTM D256
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0.45 MPa, not annealed 204 °C ASTM D648 1.8 MPa, not annealed 93.3 °C ASTM D648	Thermal	Nominal Value	Unit	Test Method
1.8 MPa, not annealed 93.3 °C ASTM D648	Deflection Temperature Under Load			ASTM D648
	0.45 MPa, not annealed	204	°C	ASTM D648
CLTE - Flow 9.0E-5 cm/cm/°C ASTM D696	1.8 MPa, not annealed	93.3	°C	ASTM D648
	CLTE - Flow	9.0E-5	cm/cm/°C	ASTM D696

Thermal Conductivity	0.23	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+13	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.60		ASTM D150
Dissipation Factor (1 MHz)	0.015		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.59 mm)	НВ		UL 94
Additional Information			

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 15mil/in.Tensile Elongation, ASTM D-638: 9-10%Wear Factor, K, ASTM D-3702: 15E-10in³/min/ft/lb/hrCoefficient of Friction, ASTM 3702, Dynamic: 0.10The coefficient of friction and wear factor were 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
Rear Temperature	254 - 282	°C
Middle Temperature	254 - 282	°C
Front Temperature	254 - 282	°C
Mold Temperature	60.0 - 93.3	°C
Injection Pressure	68.9 - 138	MPa

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