RTP 1305

Polyphenylene Sulfide RTP Company



Technical Data

Product Description			
Glass Fiber - UL94 V-0			
General			
Material Status	 Commercial: Active 		
Literature ¹	Brochure - Design Guide (English)Processing - Comprehensive Molding Guide (English)		
UL Yellow Card ²	• E84658-251522		
Search for UL Yellow Card	RTP CompanyRTP		
Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Filler / Reinforcement	Glass Fiber, 30% Filler by	Weight	
RoHS Compliance	 Contact Manufacturer 		
Processing Method	Injection Molding		
Physical		Nominal Value Unit	Test Method
Specific Gravity		1.58 g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.20 mm)		0.10 to 0.30 %	ASTM D955

Water Absorption (23°C, 24 hr) 0.020 % ASTM D570 Moisture Content 0.040 % Mechanical Nominal Value Unit Test Method Tensile Modulus 13100 MPa ASTM D638 Tensile Strength 152 MPa ASTM D638 Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Flexural Modulus 12400 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Ized Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Ized Impact (3.20 mm) 91 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms-cm ASTM D450 Dielectric Strength 4 (in Oil) 14 kV/mm ASTM D150 Dissipation Factor (1 MHz) 3.50 <th>Molding Shrinkage - Flow (3.20 mm)</th> <th>0.10 to 0.30 %</th> <th>ASTM D955</th>	Molding Shrinkage - Flow (3.20 mm)	0.10 to 0.30 %	ASTM D955
Mechanical Nominal Value Unit Test Method Tensile Modulus 13100 MPa ASTM D638 Tensile Strength 152 MPa ASTM D638 Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Flexural Modulus 200 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 91 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 266 °C 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms-cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D150 Dissipation Factor (1 MHz) 3.50	Water Absorption (23°C, 24 hr)	0.020 %	ASTM D570
Tensile Modulus 13100 MPa ASTM D638 Tensile Strength 152 MPa ASTM D638 Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Flexural Modulus 12400 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 266 °C 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D150 Diespipation Factor (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec	Moisture Content	0.040 %	
Tensile Strength 152 MPa ASTM D638 Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Flexural Modulus 12400 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 266 °C STM D648 1.8 MPa, Unannealed 266 °C STM D648 Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D150 Diesplation Factor (1 MHz) 3.50 ASTM D150 Arc Resistance 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method V-0	Mechanical	Nominal Value Unit	Test Method
Tensile Elongation (Yield) 1.0 to 2.0 % ASTM D638 Flexural Modulus 12400 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D495 Dielectric Strength 4 (in Oil) 14 kV/mm ASTM D149 Dielectric Constant (1 MHz) 3.50 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value	Tensile Modulus	13100 MPa	ASTM D638
Flexural Modulus 12400 MPa ASTM D790 Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 91 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D150 Diesipation Factor (1 MHz) 3.50 ASTM D150 Arc Resistance 120 sec ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flammability Nominal Value Unit	Tensile Strength	152 MPa	ASTM D638
Flexural Strength 200 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 ASTM D648 1.8 MPa, Unannealed 266 °C Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength 4 (in Oil) 14 kV/mm ASTM D149 Dielectric Constant (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Tensile Elongation (Yield)	1.0 to 2.0 %	ASTM D638
Impact Nominal Value Unit Test Method Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength 4 (in Oil) 14 kV/mm ASTM D149 Diesctric Constant (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Flexural Modulus	12400 MPa	ASTM D790
Notched Izod Impact (3.20 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D149 Diesipation Factor (1 MHz) 3.50 ASTM D150 Arc Resistance 1.0E-3 ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Flexural Strength	200 MPa	ASTM D790
Unnotched Izod Impact (3.20 mm) 430 J/m ASTM D4812 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D149 Diesipation Factor (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Impact	Nominal Value Unit	Test Method
Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 122 ASTM D785 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength 4 (in Oil) 14 kV/mm ASTM D149 Dielectric Constant (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Notched Izod Impact (3.20 mm)	91 J/m	ASTM D256
Rockwell Hardness (R-Scale) Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 1.8 MPa, Unannealed Electrical Nominal Value Unit Test Method 266 °C Electrical Nominal Value Unit Test Method Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength 4 (in Oil) Dielectric Constant (1 MHz) Diesipation Factor (1 MHz) Arc Resistance 120 sec ASTM D150 ASTM D495 Flammability Nominal Value Unit Test Method Test Method ASTM D150 ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) Nominal Value Unit	Unnotched Izod Impact (3.20 mm)	430 J/m	ASTM D4812
ThermalNominal Value UnitTest MethodDeflection Temperature Under Load 1.8 MPa, Unannealed266 °CElectricalNominal Value UnitTest MethodVolume Resistivity> 1.0E+16 ohms·cmASTM D257Dielectric Strength 4 (in Oil)14 kV/mmASTM D149Dielectric Constant (1 MHz)3.50ASTM D150Dissipation Factor (1 MHz)1.0E-3ASTM D150Arc Resistance120 secASTM D495FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Hardness	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed 266 °C Electrical Nominal Value Unit Volume Resistivity > 1.0E+16 ohms·cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D149 Dielectric Constant (1 MHz) Dissipation Factor (1 MHz) Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method ASTM D150 ASTM D150 D150 ASTM D150 ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information	Rockwell Hardness (R-Scale)	122	ASTM D785
1.8 MPa, Unannealed266 °CElectricalNominal Value UnitTest MethodVolume Resistivity> 1.0E+16 ohms·cmASTM D257Dielectric Strength 4 (in Oil)14 kV/mmASTM D149Dielectric Constant (1 MHz)3.50ASTM D150Dissipation Factor (1 MHz)1.0E-3ASTM D150Arc Resistance120 secASTM D495FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Thermal	Nominal Value Unit	Test Method
ElectricalNominal Value UnitTest MethodVolume Resistivity> 1.0E+16 ohms·cmASTM D257Dielectric Strength 4 (in Oil)14 kV/mmASTM D149Dielectric Constant (1 MHz)3.50ASTM D150Dissipation Factor (1 MHz)1.0E-3ASTM D150Arc Resistance120 secASTM D495FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Deflection Temperature Under Load		ASTM D648
Volume Resistivity > 1.0E+16 ohms⋅cm ASTM D257 Dielectric Strength ⁴ (in Oil) 14 kV/mm ASTM D149 Dielectric Constant (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	1.8 MPa, Unannealed	266 °C	
Dielectric Strength 4 (in Oil)14 kV/mmASTM D149Dielectric Constant (1 MHz)3.50ASTM D150Dissipation Factor (1 MHz)1.0E-3ASTM D150Arc Resistance120 secASTM D495FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Electrical	Nominal Value Unit	Test Method
Dielectric Constant (1 MHz) 3.50 ASTM D150 Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Volume Resistivity	> 1.0E+16 ohms·cm	ASTM D257
Dissipation Factor (1 MHz) 1.0E-3 ASTM D150 Arc Resistance 120 sec ASTM D495 Flammability Nominal Value Unit Test Method Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Dielectric Strength ⁴ (in Oil)	14 kV/mm	ASTM D149
Arc Resistance120 secASTM D495FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Dielectric Constant (1 MHz)	3.50	ASTM D150
FlammabilityNominal Value UnitTest MethodFlame Rating (0.800 mm)V-0UL 94Additional InformationNominal Value Unit	Dissipation Factor (1 MHz)	1.0E-3	ASTM D150
Flame Rating (0.800 mm) V-0 UL 94 Additional Information Nominal Value Unit	Arc Resistance	120 sec	ASTM D495
Additional Information Nominal Value Unit	Flammability	Nominal Value Unit	Test Method
	Flame Rating (0.800 mm)	V-0	UL 94
Primary Additive 30 %	Additional Information	Nominal Value Unit	
	Primary Additive	30 %	

Injection	Nominal Value Unit
Drying Temperature	149°C
Drying Time	6.0 hr
Processing (Melt) Temp	307 to 329 °C
Mold Temperature	135 to 177 °C

Form No. TDS-6993-en



Polyphenylene Sulfide

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PROSPECTOR®

Nominal Value Unit Injection

Injection Pressure 68.9 to 103 MPa

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ Method A (Short-Time)

RTP Company



www.ulprospector.com

Where to Buy

Supplier

RTP Company Winona, MN USA Telephone: 800-433-4787

Web: http://www.rtpcompany.com/

Distributor

GAZECHIM PLASTIQUES

GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.

Telephone: +33-4-67-49-55-37 Web: http://www.gazechim.com/ Availability: France, United Kingdom



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