RTP 205D MS 2

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.

Additive Molybdenum disulfiede lubricant (2%) Features Good wear resistance Lubrication RoHS Compliance Contact manufacturer RoHS Compliance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.31 g/cm³ ASTM D792 Molding Shrinkage - Flow (3.18 mm) 0.30 % ASTM D955 Water Absorption (23°C, 24 hr) 0.23 % ASTM D955 Water Absorption (23°C, 24 hr) 0.23 % ASTM D950 Mechanical Nominal Value Unit Test Method Tensile Modulus 8270 MPa ASTM D638 Tensile Strength 124 MPa ASTM D638 Tensile Inongation (Break) 2.5 % ASTM D958 Flexural Modulus 6890 MPa ASTM D638 Flexural Modulus 6890 MPa ASTM D638 Flexural Strength 207 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.18 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.18 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.18 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.18 mm) 640 J/m ASTM D256 Unnotched Izod Impact (3.18 mm) 640 J/m ASTM D648 OAS MPa, not annealed 216 °C ASTM D648 OAS MPa, not annealed 210 °C ASTM D648 1.8 MPa, not annealed 210 °C ASTM D648 CLTE - Flow 2.9E-5 cm/cm/°C ASTM D696 Thermal Conductivity 0.48 W/m/K ASTM C177	General Information				
Features Good wear resistance Lubrication RoHS Compliance Contact manufacturer Appearance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.31 g/cm³ ASTM D932 Molding Shrinkage - Flow (3.18 mm) 0.30 % ASTM D955 Water Absorption (23°C, 24 hr) 0.23 % ASTM D570 Mechanical Nominal Value Unit Test Method Tensile Endodulus 8270 MPa ASTM D638 Tensile Elongation (Break) 2.5 % ASTM D638 Tensile Elongation (Break) 2.5 % ASTM D638 Flexural Modulus 6890 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Ized Impact (3.18 mm) 91 J/m ASTM D638 Thermal Nominal Value Unit Test Method Unnotched Ized Impact (3.18 mm) 9	Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight			
RoHS Compliance Contact manufacturer Appearance Black Natural color Forms Particle Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.31 g/cm³ ASTM D792 Molding Shrinkage - Flow (3.18 mm) 0.30 % ASTM D955 Water Absorption (23°C, 24 hr) 0.23 % ASTM D570 Mechanical Nominal Value Unit Test Method Tensile Modulus 8270 MPa ASTM D638 Tensile Elongation (Break) 2.5 % ASTM D638 Tensile Elongation (Break) 2.5 % ASTM D638 Flexural Modulus 6890 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.18 mm) 91 J/m ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.18 mm) 640 J/m ASTM D648 Unnotched Izo	Additive	Molybdenum disulfide lubricant (2%)			
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Flexural Strength 207 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (3.18 mm) 91 J/m ASTM D256 Unnotched Izod Impact (3.18 mm) 640 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 216 °C ASTM D648 1.8 MPa, not annealed 210 °C ASTM D648 CLTE - Flow 2.9E-5 cm/cm/°C ASTM D696 Thermal Conductivity 0.48 W/m/K ASTM C177 Electrical Nominal Value Unit Test Method	Tensile Elongation (Break)	2.5	%	ASTM D638	
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CLTE - Flow 2.9E-5 cm/cm/°C ASTM D696 Thermal Conductivity 0.48 W/m/K ASTM C177 Electrical Nominal Value Unit Test Method	0.45 MPa, not annealed	216	°C	ASTM D648	
Thermal Conductivity 0.48 W/m/K ASTM C177 Electrical Nominal Value Unit Test Method	1.8 MPa, not annealed	210	°C	ASTM D648	
Electrical Nominal Value Unit Test Method	CLTE - Flow	2.9E-5	cm/cm/°C	ASTM D696	
	Thermal Conductivity	0.48	W/m/K	ASTM C177	
Volume Resistivity 1.0E+13 ohms·cm ASTM D257	Electrical	Nominal Value	Unit	Test Method	
	Volume Resistivity	1.0E+13	ohms·cm	ASTM D257	

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.: 4mil/in.Wear Factor, K, ASTM D-3702: 90E-10in³/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.31The 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
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 - 103	MPa

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