

Tepla® T2015GF 20TF

Material Description:

Tepla® T2015GF 20TF is a Polyphenylene Sulfide (PPS) product filled with 15% glass fiber and 20% PTFE. Characteristics include: Lubricated, Wear Resistant.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Middle East • North America • Latin America • Africa
Filler/Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• PTFE Lubricant: 20%
Features	• Lubricated • Good Dimensional Stability • Low Moisture Absorption • Good Rigidity • Flame Retardant • Creep Resistant • Chemical Resistant • Wear Resistant
Appearance	• Black • Natural Color
Forms	• Pellets
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.6	g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.5	%	ASTM D955
Water Absorption (24 hr, 23°C)	0.02	%	ASTM D570

Hardness	Typical Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	8850	MPa	ASTM D638
Tensile Strength	57	MPa	ASTM D638
Tensile Elongation(Break)	1.1	%	ASTM D638
Flexural Modulus	7300	MPa	ASTM D790
Flexural Strength	84	MPa	ASTM D790
Compressive Strength	63	MPa	ASTM D695
Coefficient of Friction			ASTM D1894
vs. Metal - Dynamic	0.12		
vs. Metal - Static	0.1		

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact(3.18mm)	56	J/m	ASTM D256
Unnotched Izod Impact(3.18mm)	167	J/m	ASTM D4812

Flammability	Typical Value	Unit	Test Method
Flame Rating	V-0		UL 94

Electrical Properties	Typical Value	Unit	Test Method
Volume Resistivity	1.00E+16	ohms-cm	ASTM D257
Dielectric Strength	14	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.4		ASTM D150
Dissipation Factor (1 MHz)	1.00E-03		ASTM D150

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	260	°C	
1.8 MPa, Unannealed	232	°C	
CLTE - Flow	3.20E-05	cm/cm/°C	ASTM D696
Thermal Conductivity	0.3	W/m/K	ASTM C177

Processing Information	Typical Value	Unit
Drying Temperature	149	°C
Drying Time	6	hr
Suggested Max Moisture	0.04	%
Suggested Max Regrind	20	%
Rear Temperature	302 to 343	°C
Middle Temperature	302 to 343	°C
Front Temperature	302 to 343	°C
Mold Temperature	149 to 177	°C
Injection Pressure	103 to 138	MPa
Clamp Tonnage	6.9 to 11	kN/cm ²

Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 7mil/in.

Wear Factor, K, ASTM D-3702: 110E-10in³/min/ft/lb/hr

Coefficient of Friction, Dynamic, ASTM D-3702: 0.12

Coefficient of Friction, Static, ASTM D-3702: 0.10

NFD ADVANCED COMPOSITES

Tepla® T2015GF 20TF

CAUTION/警告!

Before using, read the Molding Guide, Material Safety Data Sheets, and Bulletins available from NFD Advanced Composites Sales offices and Distributors supplied to your company. Caution! During drying, purging and molding, small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat. Use adequate local exhaust ventilation during thermal processing. To prevent resin decomposition, do not contaminate the resin or exceed the recommended melt temperature or hold-up time. Avoid inhalation or skin and eyes contact. Sweep up and dispose of spilled resin to eliminate slipping hazard. 在使用之前，请阅读NFD公司销售办事处和经销商提供给贵公司的材料成型指南、材料安全数据表和公告。警告！在干燥、吹扫和成型过程中，少量有害气体或颗粒物可能会在被释放，这些可能会刺激眼睛，鼻子和喉咙。热处理过程中请注意做好排气通风工作。为防止树脂分解，请勿污染树脂或超过我们为您推荐的热融温度或时间。请避免吸入或与皮肤、眼睛等接触。清扫和处理溢出的树脂，以消除滑倒的危险。

LEGAL NOTICES/法律声明

The figures indicated here are approximate values. They may be affected by different factors, and the user is not released therefore from the obligation of performing checks and trials of his own. The values indicated here have been compiled on the basis of current tests and findings. Any legally binding guarantee of certain properties, or any suitability for a specific application can not be inferred from the present data. For detailed production regulatory information, contact customer service.

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