Tarnoform® 300 FT1,4

Acetal (POM) Copolymer

Grupa Azoty S.A.

Message:

Tarnoform® 300 FT1,4 there is injection-moulding grade, modified with addition of PTFE improving tribological characteristics, such as low coefficient of friction and wear. Material conforms to FDA requirements (21 CFR § 177.2470, 21 CFR § 177.1550).

General Information			
Additive	PTFE Lubricant		
Features	Food Contact Acceptable Good Wear Resistance Low Friction		
Uses	Bearings Conveyor Parts Gears		
Agency Ratings	FDA 21 CFR 177.1550 FDA 21 CFR 177.2470		
Appearance	Black Colors Available Natural Color		
Forms	Granules		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.44	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	7.00	cm³/10min	ISO 1133
Molding Shrinkage - Flow (2.00 mm)	2.0	%	ISO 294-4
Water Absorption			ISO 62
Saturation, 23°C	0.65	%	
Equilibrium, 23°C, 50% RH	0.20	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness (H 358/30)	140	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2500	MPa	ISO 527-2/1
Tensile Stress (Yield)	55.0	MPa	ISO 527-2/50

Tensile Strain			ISO 527-2/50
Yield	9.0	%	
Break	20	%	
Flexural Modulus [1]	2300	MPa	ISO 178
Flexural Stress [2]	60.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	3.5	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength	90	kJ/m^2	ISO 179/1eU
Notched Izod Impact Strength	5.0	kJ/m^2	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	110	°C	ISO 75-2/A
Vicat Softening Temperature	140	°C	ISO 306/B
Melting Temperature	167	°C	ISO 11357-3
CLTE - Flow (23 to 55°C)	1.1E-4	cm/cm/°C	ISO 11359-2
Limit of Temperature - a few hours operation	100	°C	
Burning Rate	< 100	mm/min	FMVSS 302
ISO Type	POM-K, M-GNS, 03-002		ISO 1874
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Electric Strength (2.00 mm)	23	kV/mm	IEC 60243-1
Dielectric Constant (1 Hz)	3.70		IEC 60250
Dissipation Factor (1 Hz)	0.010		IEC 60250
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (3.20 mm)	HB		UL 94
Injection	**Nominal Value**	**Unit**	
Drying Temperature	100 to 120	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	< 0.10	%	
Suggested Max Regrind	10	%	
Processing (Melt) Temp	180 to 230	°C	
Mold Temperature	60.0 to 120	°C	
Injection Pressure	60.0 to 120	MPa	
Injection Rate	Slow-Moderate		
NOTE			
1.	2.0 mm/min		
2.	2.0 mm/min		

Recommended distributors for this material

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