# HiFill® POM CO GF20 UV BK

## Acetal (POM) Copolymer

### Techmer Engineered Solutions

#### Message:

HiFill® POM CO GF20 UV BK is an Acetal (POM) Copolymer product filled with 20% glass fiber. It can be processed by injection molding and is available in North America. Characteristics include: Flame Rated Chemically Coupled Copolymer UV Stabilized

UL YellowCard E253782-101773917   Filler / Reinforcement Glass Fiber,20% Filler by Weight   Additive UV Stabilizer   Features Chemically Coupled Copolymer   Appearance Black   Forms Pellets   Processing Method Injection Molding   Physical Nominal Value Unit   Specific Gravity 1.53 g/cm³   Molding Shrinkage - Flow (3.18 mm) 0.80 %   Matter Absorption (24 hr) 0.50 %   Ackevel Hardness Nominal Value Unit   Test Method Test Method   Rockwell Hardness (R-Scale) 82 ASTM D570   Hardness Nominal Value Unit Test Method   Tensile Elongation (Break) 110 MPa ASTM D755   Mechanical Nominal Value Unit Test Method   Tensile Elongation (Break) 2.0 % ASTM D638   Flexural Modulus 6550 MPa ASTM D790   Flexural Modulus 6550 MPa ASTM D790   Impact Nominal Value Unit Test Method   Notcheel Izod Impact (23 °C, 318 mm) 69 J/m ASTM D638   Flexural Modulus 6550 MPa	General Information			
AdditiveUV StabilizerFeaturesChemically Coupled CopolymerAppearanceBlackFormsPelletsProcessing MethodInjection MoldingPhysicalNominal ValueUnitPspecific Gravity1.53g/cm³ASTM D792Molding Shrinkage - Flow (3.18 mm)0.80%Astron (24 hr)0.50%Astron (24 hr)0.50%Astron (24 hr)0.50%Astron (24 hr)0.50%Astron (24 hr)0.50%Mockwell Hardness (R-Scale)82ASTM D795MechanicalNominal ValueUnitTest MethodTensile Strength (Break)110MPaASTM D638Flexural Modulus6550MPaASTM D638Flexural Modulus6550MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm)69J/nASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (18 MPa, Unannealed)160°CASTM D648CLTE - Flow4.0E-5cm/cm/°CASTM D696	UL YellowCard	E253782-101773917		
Features   Chemically Coupled Cooplymer     Appearance   Black     Forms   Pellets     Processing Method   Injection Molding     Physical   Nominal Value   Unit   Test Method     Specific Gravity   1.53   g/cm³   ASTM D792     Molding Shrinkage - Flow (3.18 mm)   0.80   %   ASTM D792     Molding Shrinkage - Flow (3.18 mm)   0.80   %   ASTM D792     Molding Shrinkage - Flow (3.18 mm)   0.80   %   ASTM D792     Molding Shrinkage - Flow (3.18 mm)   0.80   %   ASTM D795     Mater Absorption (24 hr)   0.50   %   ASTM D70     Hardness   Nominal Value   Unit   Test Method     Rockwell Hardness (R-Scale)   82   ASTM D785     Mechanical   Nominal Value   Unit   Test Method     Tensile Strength (Break)   110   MPa   ASTM D638     Tensile Elongation (Break)   2.0   %   ASTM D638     Flexural Modulus   6550   MPa   ASTM D638     Flexural Modulus   6550   MPa   ASTM D576     Impact	Filler / Reinforcement	Glass Fiber,20% Filler by Weight		
CopolymerAppearanceBlackFormsPelletsProcessing MethodInjection MoldingPhysicalNominal ValueUnitSpecific Gravity1.53g/cm³Molding Shrinkage - Flow (3.18 mm)0.80%ASTM D792Molding Shrinkage - Flow (3.18 mm)0.50%Astm D570HardnessNominal ValueUnitRockwell Hardness (R-Scale)82ASTM D785MechanicalNominal ValueUnitTest MethodTest MethodTensile Elongation (Break)2.0%Eloural Modulus6550MPaFlexural Modulus6550MPaASTM D790ImpactNominal ValueImpactNominal ValueUnitNotched Izod Impact (23°C, 3.18 mm)69J/mDeflection Temperature Under Load (1.8 MPa, Unannealed)160°CCLTE - Flow4.0E-5cm/cm/°CASTM D696	Additive	UV Stabilizer		
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HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale)82ASTM D785MechanicalNominal ValueUnitTest MethodTensile Strength (Break)110MPaASTM D638Tensile Elongation (Break)2.0%ASTM D638Flexural Modulus6550MPaASTM D790Flexural Strength165MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm)69J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed)160°CASTM D648CLTE - Flow4.0E-5cm/cm/°CASTM D696	Molding Shrinkage - Flow (3.18 mm)	0.80	%	ASTM D955
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Tensile Elongation (Break)2.0%ASTM D638Flexural Modulus6550MPaASTM D790Flexural Strength165MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm)69J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed)160°CASTM D648CLTE - Flow4.0E-5cm/cm/°CASTM D696	Mechanical	Nominal Value	Unit	Test Method
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MPa, Unannealed) 160 °C ASTM D648   CLTE - Flow 4.0E-5 cm/cm/°C ASTM D696	Thermal	Nominal Value	Unit	Test Method
	-	160	°C	ASTM D648
Flammability Nominal Value Test Method	CLTE - Flow	4.0E-5	cm/cm/°C	ASTM D696
	Flammability	Nominal Value		Test Method
Flame Rating (1.50 mm) HB UL 94	Flame Rating (1.50 mm)	НВ		UL 94
Injection Nominal Value Unit	Injection	Nominal Value	Unit	

Drying Temperature	71.1	°C	
Drying Time	1.0	hr	
Rear Temperature	177 to 193	°C	
Middle Temperature	188 to 210	°C	
Front Temperature	182 to 199	°C	
Nozzle Temperature	177 to 204	°C	
Processing (Melt) Temp	193 to 216	°C	
Mold Temperature	82.2 to 121	°C	

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