BMC 100

Thermoset Polyester

Bulk Molding Compounds, Inc.

Message:

BMC 100 is a Thermoset Polyester product. It can be processed by injection molding and is available in North America. Typical application: Electrical/Electronic Applications. Primary characteristic: flame rated.

UsesElectrical PartsFormsPelletsProcessing MethodInjection MoldingPhysicalNominal ValueUnitPhysicalNominal ValueUnitSpecific Gravity1.94Grav ¹ Molding Shrinkage - Flow0.010 0.40%Molding Shrinkage - Flow0.010 0.40%Molding Shrinkage - Flow0.010 0.40%Mater Absorption (24 hr)0.070%Barcol HarchessMorinal ValueUnitBarcol HarchessMominal ValueUnitBarcol Harchess40Test MethodBarcol HarchessMominal ValueUnitBarcol Harchess100MPaBarcol Harchess13100MPaFlexural Modulus13100MPaCompressive Strength145MPaNothel Izod ImpactNominal ValueUnitCompressive Strength160J/mNothel Zool ImpactNominal ValueUnitPeletcio Temperature Under Load (18 MR, Unannealed)SecASTM D58Morinal ValueUnitTest MethodVolume Resistivity28E-16ohms-renASTM D58Comparative Tracking Index (CTI) (159) mmSoloNominal ValueUnitComparative Tracking Index (CTI) (159) mmSoloNominal ValueVarimonDielectric Strength180VarimonASTM D58Comparative Tracking Index (CTI) (159) mmSoloNominal ValueUnit 746FlammabilityUnit Value	General Information			
Processing MethodInjection MoldingPhysicalNominal ValueUnitTest MethodSpecific Gravity1.94g/cm³ASTM D792Molding Shrinkage - Flow0.10 to 0.40%ASTM D595Water Absorption (24 hg)0.070%ASTM D570HardnessNominal ValueUnitTest MethodBarcol Hardness40Test MethodStM D583MechanicalNominal ValueUnitTest MethodBarcol HardnessASTM D638MPaASTM D638Berural Modulus13100MPaASTM D638Flexural Strength (Yield)89.6MPaASTM D695Compressive Strength145MPaASTM D695ImpactNominal ValueUnitTest MethodDeflection Temperature Under Load (18YmASTM D696PressSominal ValueUnitTest MethodDeflection Temperature Under Load (18YmASTM D648ElectricalNominal ValueUnitTest MethodVolume Resistivity28E-16Omms - Comparative (19)ASTM D648Volume Resistivity28E-16Mins - Comparative (19)SiTM D648Comparative Tracking Index (CTI) (1.59YmUnitTest MethodFlexing I.159 mmin50VittUnitTest MethodNominal ValueUnitTest MethodSitM D655Dielectric Tracking Index (CTI) (1.59YmSitM D656YmRead TemperatureSitM D648YmSitM D648Diel	Uses	Electrical Parts		
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Dielectric Strength17kV/mmASTM D149Arc Resistance (1.59 mm)180secASTM D495Comparative Tracking Index (CTI) (1.59 mm)500VUL 746FlammabilityNominal ValueUnitTest MethodFlame Rating (1.59 mm)HBUl 94Ul 94InjectionNominal ValueUnitUL 94Rear Temperature32.2 to 43.3°CCMiddle Temperature32.2 to 43.3°CCFront Temperature32.2 to 43.3°CCFont Temperature157 to 177°CC	Electrical	Nominal Value	Unit	Test Method
Arc Resistance (1.59 mm)180secASTM D495Comparative Tracking Index (CTI) (1.59 mm)500VUL 746FlammabilityNominal ValueUnitTest MethodFlame Rating (1.59 mm)HBUl 94InjectionNominal ValueUnitRear Temperature32.2 to 43.3°CMiddle Temperature32.2 to 43.3°CFront Temperature32.2 to 43.3°CFront Temperature157 to 177°C	Volume Resistivity	2.8E+16	ohms·cm	ASTM D257
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mm)500VUL 746FlammabilityNominal ValueUnitTest MethodFlame Rating (1.59 mm)HBUl 94InjectionNominal ValueUnitUl 94Rear Temperature32.2 to 43.3°CCMiddle Temperature32.2 to 43.3°CCFront Temperature32.2 to 43.3°CCMold Temperature157 to 177°CC	Arc Resistance (1.59 mm)	180	sec	ASTM D495
Flame Rating (1.59 mm)HBUL 94InjectionNominal ValueUnitRear Temperature32.2 to 43.3°CMiddle Temperature32.2 to 43.3°CFront Temperature32.2 to 43.3°CMold Temperature157 to 177°C		500	V	UL 746
InjectionNominal ValueUnitRear Temperature32.2 to 43.3°CMiddle Temperature32.2 to 43.3°CFront Temperature32.2 to 43.3°CMold Temperature157 to 177°C	Flammability	Nominal Value	Unit	Test Method
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Middle Temperature32.2 to 43.3°CFront Temperature32.2 to 43.3°CMold Temperature157 to 177°C	Injection	Nominal Value	Unit	
Front Temperature32.2 to 43.3°CMold Temperature157 to 177°C	Rear Temperature	32.2 to 43.3	°C	
Mold Temperature 157 to 177 °C	Middle Temperature	32.2 to 43.3	°C	
·	Front Temperature	32.2 to 43.3	°C	
Injection Pressure 6.89 MPa	Mold Temperature	157 to 177	°C	
	Injection Pressure	6.89	MPa	

Clamp Tonnage	3.4	kN/cm ²
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