Technical Data Sheet

Bmc 1454

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description
BMC 1454 is a special low-cost material developed specifically for injection molding circuit breakers. It has considerable flame, arc and track resistance. BMC 1454 is a medium strength material with excellent flexural strength necessary to meet the arc interruption test required for circuit breakers. UL® recognized. This material was formerly known as Glastic® 1454.

General			
Filler / Reinforcement	• Glass Fiber		
Features	• Arc Resistant • Electrically Insulating	• Flame Retardant • Good Electrical Properties	• Good Strength • Tracking Resistant
Uses	• Electrical Parts	• Electrical/Electronic Applications	
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.88 to 1.94	1.88 to 1.94 g/cm³	ASTM D792
Water Absorption (24 Hr, 73°f (23°c))	0.070 to 0.12 %	0.070 to 0.12 %	ASTM D570
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength	5000 to 6000 psi	34.5 to 41.4 MPa	ASTM D638
Flexural Modulus	1.40E+6 to 1.60E+6 psi	9650 to 11000 MPa	ASTM D790
Flexural Strength	11000 to 13000 psi	75.8 to 89.6 MPa	ASTM D790
Compressive Strength	23000 to 25000 psi	159 to 172 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact	4.5 to 5.5 ft·lb/in	240 to 290 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	40 to 50	40 to 50	ASTM D2583
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed	> 500 °F	> 260 °C	
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Dielectric Strength (Method A (short-time))	520 V/mil	20 kV/mm	ASTM D149
Dissipation Factor			ASTM D150
60 Hz [1]	0.027	0.027	
60 Hz [2]	0.058	0.058	
1 Mhz [1]	0.14	0.14	
1 Mhz [2]	0.15	0.15	
Arc Resistance	213 sec	213 sec	ASTM D495
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Flame Rating	V-0	V-0	UL 94

Additional Information	Nominal Value (English)	Nominal Value (SI)
Track Resistance	1.0 day	1.0 day

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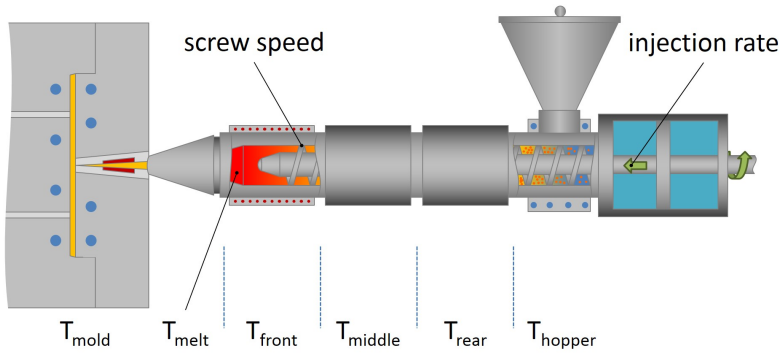

Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	536 to 626 °F	280 to 330 °C

Notes

[1] Condition A

[2] Condition D

Notes

These are typical property values not to be construed as specification limits.