NOVALAC FM 7700

Phenolic

Vyncolit N.V.

Message:

NOVALAC FM 7700 is a phenolic (Phenolic) material, which contains fiber filler. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing methods are: resin transfer molding, compression molding or injection molding.
The main features of NOVALAC FM 7700 are:
flame retardant/rated flame
chemical resistance
Creep resistance
Good dimensional stability
Typical application areas include:
Electrical/electronic applications
engineering/industrial accessories
electrical appliances
House
Tools

General Information	
Filler / Reinforcement	Fiber filler
Features	Good dimensional stability Low smoke Solvent resistance Good creep resistance alkali resistance acid resistance
Uses	Membrane key switch Pump parts Gear Electrical/Electronic Applications Electrical appliances Power/other tools Connector Application in Automobile Field Shell
Agency Ratings	ASTM D 5948, Type CFI-20
Forms	Particle
Processing Method	Resin transfer molding Compression molding Injection molding

Physical	Nominal Value	Unit	Test Method

Specific Gravity	1.38	g/cm³	ASTM D792
Bulk Factor	4.1		ASTM D1895
Molding Shrinkage - Flow (Compression Molded)	0.30	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.60	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	105		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	41.4	MPa	ASTM D638
Flexural Modulus	8960	MPa	ASTM D790
Flexural Strength	86.2	MPa	ASTM D790
Compressive Strength	165	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	100	J/m	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	177	°C	ASTM D648
CLTE - Flow	2.0E-5	cm/cm/°C	ASTM D696
RTI Elec	150	°C	UL 746
RTI Imp	150	°C	UL 746
RTI	150	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength			ASTM D149
-- [1]	5.5	kV/mm	ASTM D149
-- [2]	3.1	kV/mm	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.59 mm)	HB		UL 94
Injection	**Nominal Value**	**Unit**	
Rear Temperature	60.0	°C	
Middle Temperature	73.9	°C	
Nozzle Temperature	98.9	°C	
Processing (Melt) Temp	98.9 - 110	°C	
Mold Temperature	160 - 171	°C	
Back Pressure	0.345	MPa	

Injection instructions

Plastication: 50 to 65rpmInjection Pressure: Set to give 6 to 10 seconds injection timeHold Pressure: 50 to 100% of injection pressureHold Time: 15 sec minimumCure Time, 0.125 in: 40 to 45 secWater Absorption, ASTM D570, 48 hrs, 50°C: 2.2%Dielectric Strength, ASTM D149, 60 Hz, Method A, wet: 140 V/milDielectric Strength, ASTM D149, 60 Hz, Method B, wet: 80 V/milBulk Factor, ASTM D1895: 3.6 to 4.6Compression and Transfer Molding Conditions:
Preforming Pressure: 8000 to 12000 psi
Preheat Temperature: 210 to 235 °F
Preheat Time: 45 sec
Mold Temperature: 330 to 360 °F
Compression Mold Pressure: 2500 to 5000 psi
Transfer Mold Pressure: 4000 to 6000 psi
Cure Time, 0.125 in: 40 to 50 sec

NOTE

1.	Method A (short time)
2.	Method B (step by step)

Recommended distributors for this material

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