Ultramid® A3EG7 FC

Polyamide 66

BASF Corporation

Message:

Glass fibre reinforced injection moulding grade for articles intended to come into contact with foodstuffs.

General Information	
UL YellowCard	E41871-233731
Filler / Reinforcement	Glass Fiber,35% Filler by Weight
Features	Food Contact Acceptable Oil Resistant
Agency Ratings	EC 1907/2006 (REACH)
RoHS Compliance	RoHS Compliant
Forms	Pellets
Processing Method	Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm³	ISO 1183
Apparent Density	0.70	--	g/cm³	
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	35.0	--	cm³/10min	ISO 1133
Water Absorption				ISO 62
Saturation, 23°C	4.7 to 5.3	--	%	
Equilibrium, 23°C, 50% RH	1.4 to 1.8	--	%	
Viscosity Number (96% H2SO4 (Sulphuric Acid))	145	--	cm³/g	ISO 307
Mold Shrinkage - constrained [1]	0.50	--	%	
Maximum Service Temperature - short cycle operation	240	--	°C	
Temperature Index - at 50% loss of tensile strength				IEC 60216
-- [2]	165	--	°C	
-- [3]	135	--	°C	
Polymer Abbreviation	PA66-GF35	--		

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	11500	8500	MPa	ISO 527-2
Tensile Stress (Break)	210	150	MPa	ISO 527-2
Tensile Strain (Break)	3.0	5.0	%	ISO 527-2
Tensile Creep Modulus [4] (1000 hr)	--	6650	MPa	ISO 899-1

Flexural Modulus	10000	8000	MPa	ISO 178
Flexural Stress	300	240	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	12	--	kJ/m²	
23°C	14	22	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	75	--	kJ/m²	
23°C	95	110	kJ/m²	
Notched Izod Impact Strength (23°C)	14	18	kJ/m²	ISO 180/A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	250	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	250	--	°C	ISO 75-2/A
Melting Temperature	260	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 80°C	1.5E-5 to 2.0E-5	--	cm/cm/°C	
Transverse : 23 to 80°C	6.0E-5 to 7.0E-5	--	cm/cm/°C	
Specific Heat	1500	--	J/kg/°C	
Thermal Conductivity	0.35	--	W/m/K	DIN 52612
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.50	5.70		IEC 60250
Dissipation Factor (1 MHz)	0.020	0.15		IEC 60250
Comparative Tracking Index (Solution A)	550	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (1.60 mm)	HB	--		UL 94
Injection	Dry	Unit		
Processing (Melt) Temp	280 to 300		°C	
Mold Temperature	80.0 to 90.0		°C	
NOTE				
1.	Test box with central gating, dimensions of base (107*47*1,5) mm, processing conditions: TM = 290°C, TW = 80°C			
2.	5000 h			
3.	20000 h			

4.	strain <= 0.5%, 23°C

Recommended distributors for this material

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