

Starex GR-4005

Acrylonitrile Butadiene Styrene
LOTTE ADVANCED MATERIALS CO., LTD.

Message:

Starex GR-4005 is an acrylonitrile butadiene styrene (ABS) product, which contains a glass fiber reinforced material. It is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. Typical application areas are: commercial/office supplies. The main characteristics are: flame retardant/rated flame.

General Information			
UL YellowCard	E115797-548913		
Filler / Reinforcement	Glass fiber reinforced material		
Features	General		
Uses	Business equipment		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
natural color	1.08	g/cm ³	ASTM D792
natural color	1.09	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			
220°C/10.0 kg	15	g/10 min	ASTM D1238
220°C/10.0 kg	18	g/10 min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.20 - 0.40	%	ASTM D955
Ash Content	5.2	%	ISO 3451
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			
Class r	110		ASTM D785
R scale	110		ISO 2039-2
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2940	MPa	ASTM D638
--	3100	MPa	ISO 527-2/50
Tensile Strength			
Yield ²	58.8	MPa	ASTM D638
Yield	58.0	MPa	ISO 527-2/50
Fracture ³	47.1	MPa	ASTM D638
Fracture	54.0	MPa	ISO 527-2/50
Tensile Elongation			
Fracture ⁴	3.6	%	ASTM D638
Fracture	3.3	%	ISO 527-2/50
Flexural Modulus			
-- ⁵	3040	MPa	ASTM D790
--	3300	MPa	ISO 178

Flexural Strength			
-- ⁶	87.3	MPa	ASTM D790
--	90.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁷ (23°C)	9.1	kJ/m ²	ISO 179/1eA
Notched Izod Impact			
23°C, 3.18 mm	70	J/m	ASTM D256
23°C, 6.35 mm	71	J/m	ASTM D256
23°C ⁸	7.6	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 6.40mm	103	°C	ASTM D648
0.45 MPa, unannealed, 4.00mm	100	°C	ISO 75-2/B
1.8 MPa, unannealed, 6.40mm	96.0	°C	ASTM D648
1.8 MPa, not annealed, 4.00mm	89.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	103	°C	ISO 306/B50
--	106	°C	ISO 306/B120
Flammability	Nominal Value	Test Method	
Flame Rating			UL 94
1.6 mm	HB	UL 94	
1.8 mm	HB	UL 94	
Injection	Nominal Value	Unit	
Drying Temperature			
--	80	°C	
Hot air dryer	80	°C	
Drying Time			
--	2.0 - 4.0	hr	
Hot air dryer	2.0 - 3.0	hr	
Suggested Max Moisture	< 0.050	%	
Rear Temperature	220 - 230	°C	
Middle Temperature	200 - 210	°C	
Front Temperature	180 - 190	°C	
Nozzle Temperature	240	°C	
Mold Temperature	40 - 80	°C	
Injection Pressure	49.0 - 245	MPa	
Back Pressure	0.490 - 1.96	MPa	
Screw Speed	50 - 150	rpm	
NOTE			
1.	5.0 mm/min		
2.	5.0 mm/min		
3.	5.0 mm/min		

4.	5.0 mm/min
5.	2.8 mm/min
6.	2.8 mm/min
7.	Thickness: 4mm
8.	Thickness: 4mm

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Recommended distributors for this material

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