Telcar® TELC 1000-92 UV-2 BLACK 550

Thermoplastic Elastomer

Teknor Apex Company

Message:

Telcar®TELC 1000-92 UV-2 BLACK 550 is a thermoplastic elastomer (TPE) material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing method is injection molding.
Telcar®The typical application fields of TELC 1000-92 UV-2 BLACK 550 are: automobile industry

General Information			
Uses	Automotive exterior parts		
Appearance	Black		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	0.918	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow			ASTM D955
180°C, 30 minutes	1.3	%	ASTM D955
24 hours	1.1	%	ASTM D955
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 10 sec)	42		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus	290	MPa	ASTM D790
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [1]			ASTM D412
100% strain	8.41	MPa	ASTM D412
300% strain	8.55	MPa	ASTM D412
Tensile Strength			ASTM D412
Yield [2]	10.3	MPa	ASTM D412
Yield [3]	7.58	MPa	ASTM D412
Tensile Elongation			ASTM D412
Yield [4]	16	%	ASTM D412
Fracture [5]	540	%	ASTM D412
Fracture [6]	140	%	ASTM D412
Tear Strength [7]	364	kN/m	ASTM D624
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (-40°C)	No Break		ASTM D256
Dart Drop Impact (-30°C)	33.9	J	ASTM D3029
Tensile Impact Strength	471	kJ/m²	ASTM D1822
Aging	**Nominal Value**	**Unit**	**Test Method**

Change in Tensile Strength in Air			ASTM D573
--	6.0	%	ASTM D573
110°C, 1008 hr	10	%	ASTM D573
121°C, 1008 hr	7.0	%	ASTM D573
Change in Ultimate Elongation in Air			ASTM D573
110°C, 1008 hr	-67	%	ASTM D573
121°C, 1008 hr	-63	%	ASTM D573
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	62.8	°C	ASTM D648
1.8 MPa, not annealed	40.6	°C	ASTM D648
Glass Transition Temperature	-55.9	°C	ASTM E1356
Linear thermal expansion coefficient			ASTM D696
Flow	1.2E-4	cm/cm/°C	ASTM D696
Lateral	1.2E-4	cm/cm/°C	ASTM D696
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Rate	30	mm/min	ISO 3795
Additional Information			
Instrumented Dart Impact Energy @ Yield, -40°C, 9000 in/min, Ductile Failure: 200 in-lbsInstrumented Dart Impact Deflection @ Break, -40°C, 9000 in/min, Ductile Failure: 1359 milsInstrumented Dart Impact Energy @ Break, -40°C, 9000 in/min, Ductile Failure: 350 in-lbsFogging, Kaake Buchler, 3 hrs, 100°C: 92Tear Strength, ASTM D1004, Die C: 364 lb/inHeat Aging Performance Izod Impact, 1000 hrs, 120°C: No BreakTensile Impact Strength, ASTM D1822: >224 ft-lb/in^{2}Flammability, Burn Rate, FMVSS 302, Max 100, 30.2 mm/min: PassFlammability, Burn Rate, FMVSS 302, Max 100, 1.2 in/min: Pass			
Injection	**Nominal Value**	**Unit**	
Rear Temperature	171 - 193	°C	
Middle Temperature	177 - 199	°C	
Front Temperature	182 - 204	°C	
Nozzle Temperature	188 - 210	°C	
Processing (Melt) Temp	188 - 210	°C	
Mold Temperature	25.0 - 65.6	°C	
Injection Pressure	1.38 - 6.89	MPa	
Injection Rate	Moderate-Fast		
Back Pressure	0.172 - 0.345	MPa	
Screw Speed	50 - 100	rpm	
Cushion	3.81 - 25.4	mm	
Extrusion	**Nominal Value**	**Unit**	
Cylinder Zone 1 Temp.	166 - 188	°C	
Cylinder Zone 2 Temp.	171 - 193	°C	
Cylinder Zone 3 Temp.	177 - 199	°C	
Cylinder Zone 5 Temp.	182 - 204	°C	
Die Temperature	190 - 210	°C	
Extrusion instructions			
Screw Speed: 30 to 100 rpm			
NOTE			

1.	51 mm/min
2.	51 mm/min
3.	Type 1, 510mm/min
4.	Type 1, 510mm/min
5.	51 mm/min
6.	510 mm/min
7.	C mould

Recommended distributors for this material

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