IROGRAN® A 85 D 5001 DP

Thermoplastic Polyurethane Elastomer (Polyester)

Huntsman Corporation

Message:

IROGRAN A 85 D 5001 DP is a antistatic, polyester based thermoplastic polyurethane intended for extrusion applications and injection moulding.
IROGRAN A 85 D 5001 DP is part of the HUNTSMAN technical extrusion product range and offers a specially designed, flexible material with a broad processing window particularly suitable in flat die, cast die extrusion processes.
IROGRAN A 85 D 5001 DP is a development material.
PERFORMANCE FEATURES
Excellent wear performance
Good processability
Antistatic behaviour
Good melt flow
High elasticity

General Information	
Additive	Antistatic
Features	Antistatic Good Flexibility Good Flow Good Wear Resistance High Elasticity Hydrolytically Stable
Forms	Pellets
Processing Method	Extrusion Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity [1]	1.19	g/cm³	ASTM D792, DIN 53479
Melt Volume-Flow Rate (MVR) (190°C/21.6 kg)	75.0	cm³/10min	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240, DIN 53505
Shore A, Injection Molded	85		
Shore D, Injection Molded	34		
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Abrasion [2]			
--	25	mm³	DIN 53516
--	25	mm³	ASTM D395
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [3]			
100% Strain	5.58	MPa	ASTM D412

100% Strain	5.00	MPa	DIN 53504
300% Strain	5.58	MPa	ASTM D412
300% Strain	11.0	MPa	DIN 53504
Tensile Strength [4] (Break)	40.0	MPa	ASTM D412, DIN 53504
Tensile Elongation [5]			
Break	830	%	ASTM D412
Break	620	%	DIN 53504
Tear Strength [6]			
--	105	kN/m	ASTM D624
--	70	kN/m	ISO 34-1
Bayshore Resilience [7]	36	%	ASTM D2632

Electrical	Nominal Value	Unit
Surface Resistivity	1.0E+8	ohms

Injection	Nominal Value	Unit
Drying Temperature		
--	100 to 110	°C
Hot Air Dryer	80.0 to 90.0	°C
Drying Time		
--	3.0	hr
Hot Air Dryer	3.0	hr
Dew Point	-30.0	°C
Hopper Temperature	25.0 to 45.0	°C
Rear Temperature	190 to 210	°C
Middle Temperature	190 to 210	°C
Front Temperature	190 to 210	°C
Nozzle Temperature	185 to 210	°C
Mold Temperature	20.0 to 50.0	°C

Extrusion	Nominal Value	Unit
Drying Temperature	100 to 110	°C
Drying Time	3.0	hr
Hopper Temperature	25.0 to 40.0	°C
Cylinder Zone 1 Temp.	180 to 205	°C
Cylinder Zone 2 Temp.	180 to 205	°C
Cylinder Zone 3 Temp.	180 to 205	°C
Cylinder Zone 4 Temp.	180 to 205	°C
Cylinder Zone 5 Temp.	180 to 205	°C
Adapter Temperature	180 to 205	°C
Die Temperature	185 to 205	°C

NOTE	
1.	Injection Molded
2.	Injection Molded
3.	Injection Molded

4.	Injection Molded
5.	Injection Molded
6.	Injection Molded
7.	Injection Molded

Recommended distributors for this material

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