

IROGRAN® A 92 E 4246

Thermoplastic Polyurethane Elastomer (Polyester)

Huntsman Corporation

Message:

IROGRAN A 92 E 4246 is a thermoplastic polyester-polyurethane for injection moulding applications.

Additional characteristics of the product are short cycle times, good melt flow and easy demolding.

PERFORMANCE FEATURES

Easy demolding

Short cycle times

High demolding stability

High stability of melt

High wear resistance

APPLICATIONS

For the production of buffers, seals, sprocket wheels, bearing shells.

General Information			
Features	Fast Molding Cycle		
	Good Flow		
	Good Mold Release		
	Good Wear Resistance		
	High Melt Stability		
Uses	Bearings		
	Seals		
	Wheels		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity ¹	1.21	g/cm ³	
Melt Volume-Flow Rate (MVR) (210°C/21.6 kg)	48.0	cm ³ /10min	ISO 1133
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			
Shore A, Injection Molded	80		ASTM D2240
Shore D, Injection Molded	30		ASTM D2240
Shore A, Injection Molded	91		ISO 868
Shore D, Injection Molded	42		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Abrasion ²	25	mm ³	ISO 4649
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ³			
100% Strain	4.48	MPa	ASTM D412

100% Strain	7.00	MPa	DIN 53504
300% Strain	10.6	MPa	ASTM D412
300% Strain	15.0	MPa	DIN 53504
Tensile Strength ⁴			
Break	38.6	MPa	ASTM D412
Break	50.0	MPa	DIN 53504
Tensile Elongation ⁵			
Break	650	%	ASTM D412
Break	610	%	DIN 53504
Tear Strength ⁶			
--	89.3	kN/m	ASTM D624
--	95	kN/m	ISO 34-1
Compression Set ⁷			
23°C, 24 hr	25	%	ASTM D395, ISO 815
70°C, 24 hr	38	%	ASTM D395
70°C, 24 hr	40	%	ISO 815
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	
Rear Temperature	175 to 195	°C	
Middle Temperature	175 to 195	°C	
Front Temperature	175 to 195	°C	
Nozzle Temperature	180 to 200	°C	
Processing (Melt) Temp	170 to 195	°C	
Mold Temperature	20.0 to 70.0	°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.	165 to 190	°C	
Cylinder Zone 2 Temp.	165 to 190	°C	
Cylinder Zone 3 Temp.	165 to 190	°C	
Cylinder Zone 4 Temp.	165 to 190	°C	
Cylinder Zone 5 Temp.	165 to 190	°C	
Adapter Temperature	175 to 195	°C	
Die Temperature	175 to 200	°C	
NOTE			

1.	Injection Molded
2.	Injection Molded
3.	Injection Molded
4.	Injection Molded
5.	Injection Molded
6.	Injection Molded
7.	Injection Molded

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

