Elastollan® 890AN

Thermoplastic Polyurethane Elastomer (Polyester)

BASF Corp. Thermoplastic Polyurethanes

Message:

Elastollan® 890AN is specifically formulated for transparent film applications. It exhibits excellent abrasion resistance, toughness, transparency, and oil/fuel resistance. It has excellent damping characteristics and outstanding resistance to tear propagation. Elastollan®890AN conforms to the FDA food contact regulations as described in book 21, section 177.2600 and 177.1680 for both wet and dry food contact applications respectively. Elastollan® 890AN is supplied uncolored in pellet form.

General Information	
Features	Food Contact Acceptable
	Fuel Resistant
	Good Abrasion Resistance
	Good Tear Strength
	Good Toughness
	Oil Resistant
Agency Ratings	FDA 21 CFR 177.1680
	FDA 21 CFR 177.2600
Appearance	Colorless
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.22	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/8.7 kg)	15 to 30	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	92		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Injection Molded)	29.0	MPa	ASTM D412
Flexural Modulus (Injection Molded)	66.9	MPa	ASTM D790
Taber Abrasion Resistance	45.0	mg	ASTM D1044
Abrasion - DIN	25	mm³	DIN 53516
Softening Point - DMA	81	°C	Internal Method
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ASTM D412
100% Strain	13.8	MPa	
300% Strain	31.0	MPa	
Tensile Strength	39.3	MPa	ASTM D412
Tensile Elongation (Break)	480	%	ASTM D412

Tear Strength [1]	144	kN/m	ASTM D624
Compression Set			ASTM D395B
23°C, 22 hr	20	%	
70°C, 22 hr	45	%	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-14.0	°C	Internal Method
Vicat Softening Temperature	120	°C	ASTM D1525
Injection	**Nominal Value**	**Unit**	
Drying Temperature	110 to 120	°C	
Drying Time	2.0 to 3.0	hr	
Suggested Max Moisture	0.030	%	
Rear Temperature	190 to 220	°C	
Middle Temperature	190 to 220	°C	
Front Temperature	190 to 220	°C	
Nozzle Temperature	210 to 225	°C	
Extrusion	**Nominal Value**	**Unit**	
Drying Temperature	110 to 120	°C	
Drying Time	2.0 to 3.0	hr	
Cylinder Zone 1 Temp.	170 to 210	°C	
Cylinder Zone 3 Temp.	170 to 210	°C	
Cylinder Zone 5 Temp.	170 to 210	°C	
Adapter Temperature	200 to 220	°C	
Die Temperature	195 to 215	°C	
NOTE			
1.	Die C		

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

WECHAT