Elastollan® 688A50N

Thermoplastic Polyurethane Elastomer (Polyester)

BASF Corp. Thermoplastic Polyurethanes

Message:

Elastollan® 688AN is specifically formulated for extruded profile, sheet and film applications. It exhibits excellent abrasion resistance, toughness, high transparency, low gel, and low yellowness index. It has excellent damping characteristics and outstanding resistance to tear propagation. Elastollan® 688AN 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® 688AN is supplied uncolored in diced or pelletized form.

General Information	
Features	Food Contact Acceptable Good Abrasion Resistance Good Tear Strength Good Toughness Low Gel
Agency Ratings	FDA 21 CFR 177.1680 FDA 21 CFR 177.2600
Appearance	Clear/Transparent
Processing Method	Extrusion Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.21	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	15 to 30	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	87		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Injection Molded)	23.4	MPa	ASTM D412
Flexural Modulus (Injection Molded)	39.3	MPa	ASTM D790
Taber Abrasion Resistance	25.0	mg	ASTM D1044
Abrasion - DIN	25	mm³	DIN 53516
Softening Point - DMA	88	°C	Internal Method
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ASTM D412
100% Strain	8.96	MPa	
300% Strain	24.8	MPa	
Tensile Strength	40.0	MPa	ASTM D412
Tensile Elongation (Break)	520	%	ASTM D412

Tear Strength [1]	124	kN/m	ASTM D624
Compression Set			ASTM D395B
23°C, 22 hr	25	%	
70°C, 22 hr	45	%	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-27.0	°C	Internal Method
Vicat Softening Temperature	80.0	°C	ASTM D1525
Injection	**Nominal Value**	**Unit**	
Drying Temperature	100 to 110	°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	
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