

Elastollan[®] S Series

Polyester Type

Technical Bulletin

Elastollan[®] S series of products are polyester-based thermoplastic polyurethanes that exhibit good hydrolytic stability. They also exhibit good oil, fuel and solvent resistance. These products can be injection molded, blow molded and extruded. All grades should be dried before processing. Elastollan[®] products can be stored for up to 1 year in their original container. Containers should be stored in a cool, dry area.

Extrusion grades: S90A

Injection molding grades: S80A to S60D

Physical Properties	Units	ASTM Method	S80A ³	S85A ³	S90A ³	S95A ³	S98A ³	S60D ³
Specific gravity	gr./cm ³	D-792	1.21	1.22	1.23	1.23	1.24	1.25
Hardness	Shore A D	D-2240	80 ± 2	85 ± 2 -	92 ± 2 41 ± 2	96 ± 2 48 ± 2	98 ± 2 54 ± 2	- 60 ± 2
Tensile strength	MPa psi	D-412	27.5 4000	34 4900	39 5600	42 6100	42 6100	43 6200
Tensile stress @100 % elongation	MPa psi	D-412	5.5 800	6.9 1000	11 1550	14 2000	19 2700	22 3200
@300 % elongation	MPa psi		9.6 1400	14 1980	20 2900	26 3800	32 4700	37 5300
Elongation @brk.	%	D-412	650	690	540	510	425	450
Tensile set @brk.	%	D-412	45	35	55	70	80	110
Tear strength	N/mm lb./in.	D-624 DIE C		104 590	128 730	154 875	185 1050	195 1150
Abrasion resistance	mg (Loss)	D-1044 ² (Taber)	25	25	25	30	50	50

Test samples were cured 20 hours @ 100 °C before testing.

NOTE: ¹ These products can only be ordered in minimum quantities. Please contact your sales representative for details.

² H-18 wheel, 1000 gm weight and 1000 cycles.

³ Products with an N designation do not contain hydrolytic stabilizers. Contact Elastollan Technical Service Rep for further information

Caution: Contact with product dusts from regrinding operations may cause temporary irritation of the eyes and the respiratory tract. Use with local exhaust. Under hot melt processing conditions (170-230 °C), wear personal protective equipment to prevent thermal burns.

First aid: *Eyes*-Flush eyes with flowing water at least 15 minutes. If irritation develops, consult a physician. *Skin*-Skin contact with hot melt may cause thermal burns. Call a physician immediately. *Inhalation*-If vapors generated from the hot melt process are inhaled, move to fresh air. Aid in breathing. If breathing difficulties develop, see a physician immediately.

In case of fire: Use water fog, foam, CO₂, or dry chemical extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

Disposal: Waste material, unused contents and empty containers must be disposed of in accordance with applicable local, state or federal regulations. Refer to our Material Safety Data Sheet for specific disposal instructions.

In case of chemical emergency: Call CHEMTREC day or night for assistance and information concerning spilled material, fire, exposure and other chemical accidents. 800-424-9300

Attention: This product is sold solely for use by industrial institutions. Refer to our Material Safety Data Sheet regarding safety, usage, applications, hazards, procedures and disposal of this product. Consult your supervisor for additional information.

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

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