Elastollan® C78A15

Technical Bulletin

Polyester Type

Elastollan® C78A15 is a polyester-based thermoplastic polyurethane (TPU). It exhibits excellent abrasion resistance and toughness, good hydrolytic stability, good heat, oil, fuel, and solvent resistance. As with all TPU products, Elastollan® C78A15 must be dried before processing. The drying step is required to maintain a low moisture content until the product enters the processing equipment. The water content must be less than 0.03% before and during processing. The typical drying conditions should be 2-4 hours @ 175º-195ºF (80º-90ºC). Elastollan® C78A15 can be stored for up to 1 year in its original container. Containers should be stored in a cool and dry area.

Properties		Test Method	Typical Value	
			English	SI
Physical				
Specific Gravity	gr./cm ³	ASTM D-792	1.18	1.18
Hardness	Shore A/D	ASTM D-2240	80A	80A
Mechanical				
Tensile Strength (Ultimate)	psi/MPa	ASTM D-412	5300 psi	37 MPa
Tensile Stress	@100% Elong.	ASTM D-412	750 psi	5.0 MPa
Tensile Stress	@300% Elong.	ASTM D-412	1575 psi	11 MPa
Elongation at Break	%	ASTM D-412	690%	690%
Tensile Set at Break	%	ASTM D-412	25	25
Compression Set, %	22 hrs @ 23°C	ASTM D395 (B)	25%	25%
Compression Set, %	22 hrs @ 70°C	ASTM D395 (B)	35%	35%
Tear Strength	lb./in. N/mm	ASTM D-624, Die	500 lb./in.	85 N/mm
Taber Abrasion Resistance / mg loss	1000 gr./H-18	ASTM D-1044	25 mg	25 mg
Processing Conditions, Extrusion	°F/°C		340 - 365°F	170 - 185°C
Processing Conditions, Inj. Molding	°F/°C		340 - 365°F	170 - 185°C

The above values are shown as typical values and should not be used as specifications.

Molded plagues 0.080" thick were cured 20 hours at 100 °C before testing



