

# Elastollan® C85A10

## Technical Bulletin

## Polyester Type

Elastollan® C85A10 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® C85A10 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 @ 175°-195°F (80°-90°C). Elastollan® C85A10 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./cm³	ASTM D-792	1.19	1.19
Hardness	Shore A	ASTM D-2240	85A	85A
Mechanical				
Tensile Strength (Ultimate)	psi/MPa	ASTM D-412	5650 psi	39 MPa
Tensile Stress	@100% Elong	ASTM D-412	950 psi	6.6 MPa
Tensile Stress	@300% Elong	ASTM D-412	1900 psi	13 MPa
Elongation at Break	%	ASTM D-412	620%	620%
Tensile Set at Break	%	ASTM D-412	35%	35%
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 C	575 lb./in.	95 N/mm
Taber Abrasion Resistance / mg loss	1000 gr./H-18	ASTM D-1044	25 mg	25 mg
Thermal				
Vicat Softening Point	°F / °C	ASTM D-1525	233°F	110°C
Processing Conditions, Extrusion	°F / °C		360 - 390°F	180 - 200°C
Processing Conditions, Inj. Molding	°F / °C		365 - 395°F	180 - 200°C

The above values are shown as typical values and should not be used as specifications.  
Molded plaques 0.080" thick were cured 20 hours at 100 °C before testing

# BASF

