

# Elastollan® C90A13

## Technical Bulletin

## Polyester Type

Elastollan® C90A13 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® C90A13 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® C90A13 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
<b>Physical</b>				
Specific Gravity	gr./cm <sup>3</sup>	ASTM D-792	1.21	1.21
Hardness	Shore A/D	ASTM D-2240	90A / 41D	90A / 41D
<b>Mechanical</b>				
Tensile Strength (Ultimate)	psi / MPa	ASTM D-412	6000 psi	41 MPa
Tensile Stress	@100% Elong.	ASTM D-412	1450 psi	10 MPa
Tensile Stress	@300% Elong.	ASTM D-412	3250 psi	22 MPa
Elongation at Break	%	ASTM D-412	550%	550%
Tensile Set at Break	%	ASTM D-412	50%	50%
Compression Set, %	22 hrs @ 23°C	ASTM D395 (B)	25%	25%
Compression Set, %	22 hrs @ 70°C	ASTM D395 (B)	40%	40%
Tear Strength	lb./in. N/mm	ASTM D-624, Die C	720 lb./in.	120 N/mm
Taber Abrasion Resistance / mg loss	1000 gr./H-18	ASTM D-1044	25 mg	25 mg
<b>Processing Conditions, Extrusion</b>				
	°F / °C		370 - 400°F	190 - 205°C
<b>Processing Conditions, Inj. Molding</b>				
	°F / °C		375 - 405°F	190 - 205°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

