

OVERVIEW

Lubrizol Engineered Polymers offers the highest quality thermoplastic polyurethanes (TPUs), making us preferred by end users across the globe. In the market for decades, Estane® TPU delivers exceptional heat resistance to wire, cable and flexible cord jacketing applications. Our level of expertise has allowed us to develop new generation high-heat resistant polymers like Estane® TS92AP7 TPU.

Featuring a 125°C rating (via UL1581), and 95° RTI rating, Estane® TS92AP7 TPU is the next generation of high-temperature resistant and easily processed TPUs. Offering reliability and durability without sacrificing performance, Estane® TS92AP7 TPU delivers the hydrolysis resistance, chemical resistance and low-temperature flexibility needed to meet various application needs.

HIGH TEMPERATURE HI-DEMAND MARKETS

- Mining
- Marine
- Oil & Gas
- Military
- Communications
- Transportation



BENEFITS OF USING ESTANE® TS92AP7 TPU

- 95°C RTI rating
- 125°C High temperature resistance for harsh and demanding applications
- Excellent chemical resistance and hydrolysis resistance
- Excellent biogas resistance
- Low temperature (-40°C) bending properties
- Superior abrasion and cut through resistance lasting longer and reducing overall cost

EXCELLENT PHYSICAL PROPERTIES

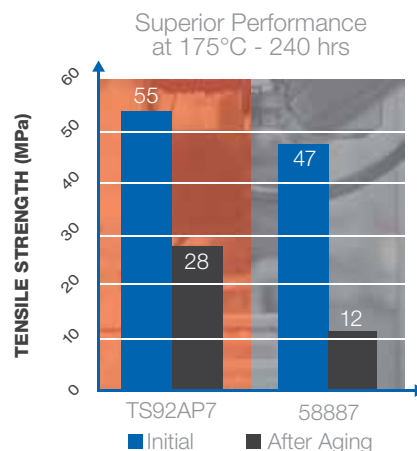
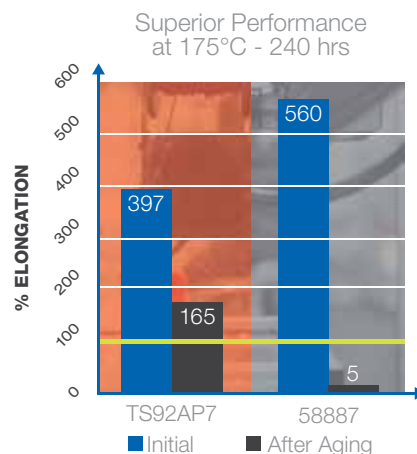
Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	92 +/- 3	Shore A	ASTM D-2240
Specific Gravity	1.20		ASTM D-792
Tensile Strength	9500 (65)	psi (MPa)	ASTM D-412
Ultimate Elongation	360	%	"
Tear Strength			
Graves	785 (14.2)	lb/in (kg/mm)	ASTM D-624 (die C)
Trouser	160 (2.9)	lb/in (kg/mm)	ASTM D-470

125°C Rating, Aged Samples, 158°C/7 days	Specification	Estane® TS92AP7 TPU
Elongation Retention	75%	98%
Tensile Strength Retention	75%	77%

Note: UL 1581, table 50.223 requires for a TPE a 75% retention of Elongation and Tensile Strength. For 125C rating cables, the aging is at 158C for 168 hours (7d) based on table 50.185

175°C TEMPERATURE RESISTANCE

Temperature/time requirements per ISO 6722



LUBRIZOL
ENGINEERED
POLYMERS

ADVANCING MATERIALS.
ELEVATING PERFORMANCE.

