

Preliminary



# P3™ Stretch™ 80

An easy-to-use general-purpose elastomer for flexible prototypes and end-use parts. Excellent replacement for traditional polyurethane or TPU.



Producing flexible prototypes just became easier with this general-purpose elastomer. This newest addition to the Origin® One elastomers materials comes at an affordable price point, making it an interesting entry-level material for users starting elastomer printing. Less viscous than typical elastomers, P3 Stretch 80 – developed by BASF - processes easily and fast on Origin® One, is simple to clean and UV post-cure. The material makes an excellent replacement for traditional polyurethane or TPU.

## Key Features

- Excellent strength and rebound
- Higher durometer durometer allows for faster printing.
- Outstanding surface finish – ideal for elastomeric parts aesthetics, grip, and interaction with Class A surfaces is essential.
- Good mechanical properties and chemical resistance
- Simple cleaning and UV post-curing process
- Black color

## Industries & Applications

- Aerospace
- Automotive
- Industrial
- Prototyping
- Jigs & fixtures
- Seals & Gaskets
- Fit & form testing for consumer products, including footwear, watch bands, accessories.

## Liquid Properties

PROPERTY	VALUE
Appearance	Matte Black
Viscosity (25°C)	500 MPa s

## Mechanical Properties

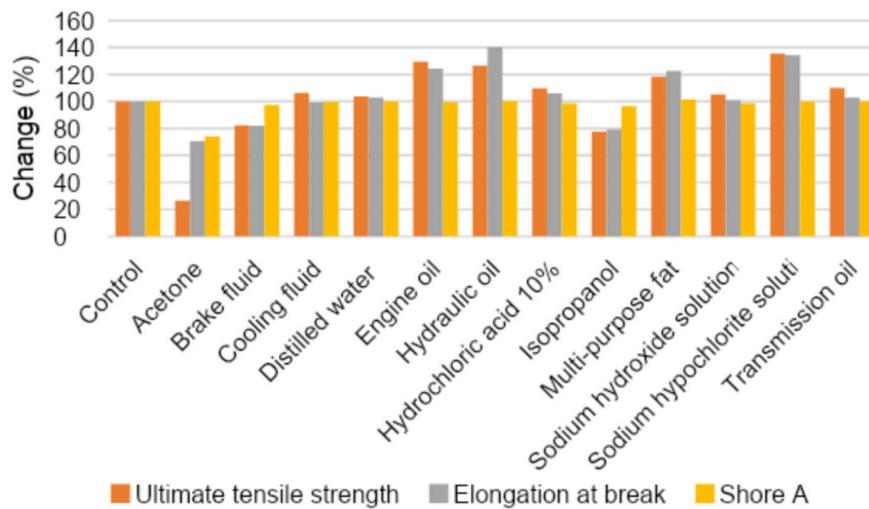
PROPERTY	UNIT	STANDARD	AVERAGE - STANDARD DEVIATION
Young's Modulus	MPa	ASTM D412	54 ± 4.5
Tensile Strength	MPa	ASTM D643	11 ± 2.4
Elongation at Break	%	ASTM D643	117 ± 17.4
Tensile Tear Resistance	N/mm	ASTM D648	19 ± 0.7
Shore A Hardness, 3 sec			87 ± 1.2
Rebound resilience			Testing in progress
Abrasion resistance			Testing in progress
Water absorption (% , 1 day, 3 day)			Testing in progress

## Ultraviolet Resistance

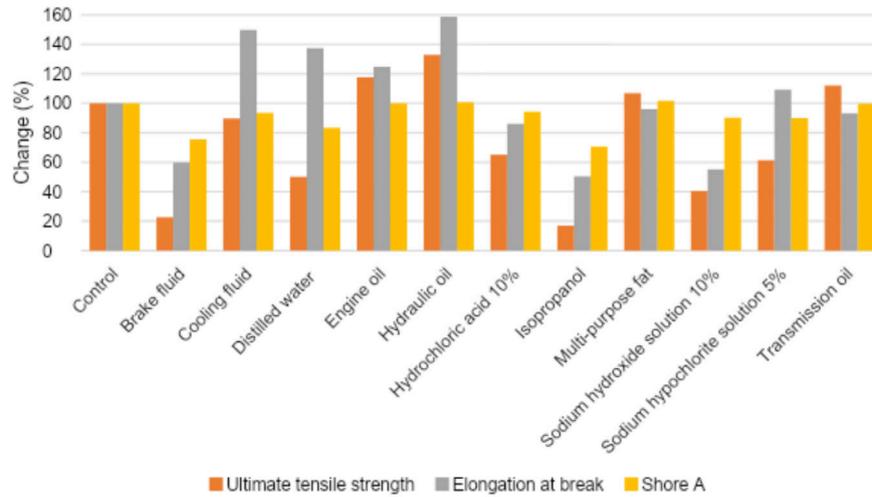
Testing in progress

## Chemical Resistance

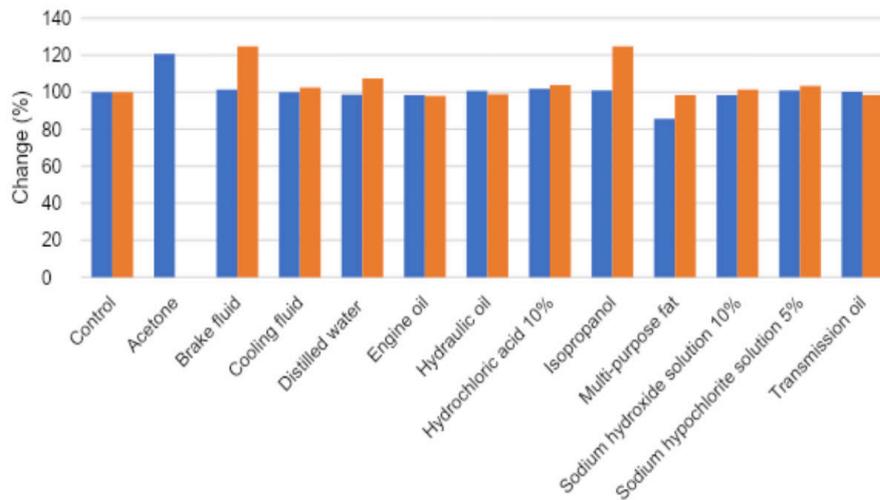
Mechanical properties after 30 minutes



### Mechanical properties after 7 days



### Total weight change



### Thermal/Electrical Properties

Testing in progress

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