



forward**am.**

P3™ Stretch™ 80

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

MATERIAL DATA SHEET
P3™ DLP





Producing flexible prototypes just became easier with this general-purpose elastomer. This newest addition to the Origin® 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 Forward AM - processes easily and fast on Origin®, is simple to clean and UV post-cure. The material makes an excellent replacement for traditional polyurethane or TPU.

Key Features

- Excellent rebound
- Higher durometer allows for faster printing.
- Outstanding surface finish – ideal for elastomeric parts where 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 |

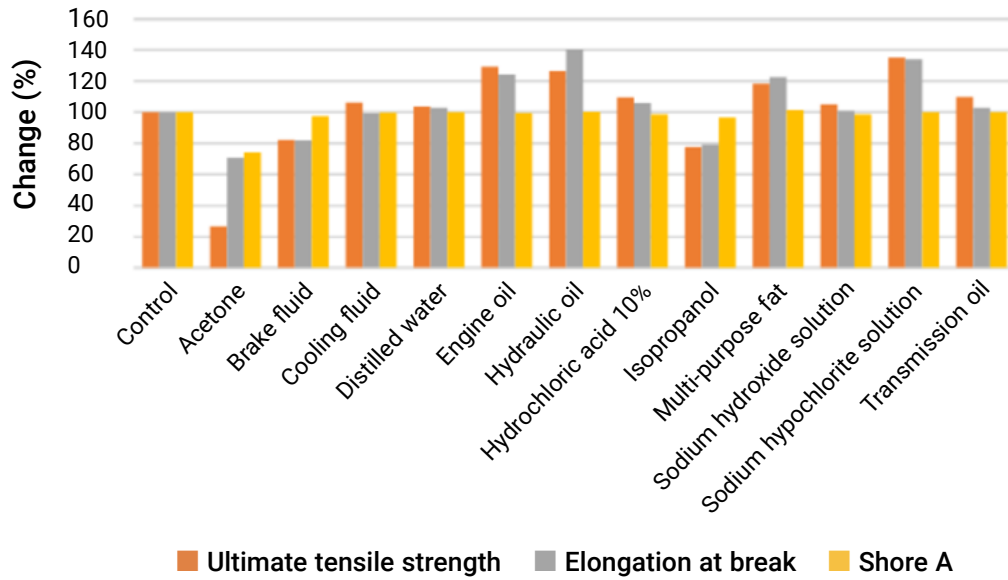
Mechanical Properties

| Property | Unit | Standard | Average - Standard Deviation |
|-------------------------------------|-----------------|------------------|------------------------------|
| Young's Modulus | MPa | ASTM D412 | 54 ± 4.5 |
| Tensile Strength | MPa | ASTM D412 type C | 11 ± 2.4 |
| Elongation at Break | % | ASTM D412 type C | 117 ± 17.4 |
| Tensile Tear Resistance | N/mm | ASTM D624 C | 19 ± 0.7 |
| Shore A Hardness, 3 sec | | | 87 ± 1.2 |
| Rebound resilience | % | ASTM D7121 | 26 |
| Abrasion resistance | mm ³ | ISO4649 | 254 |
| Water absorption (% , 1 day, 3 day) | % | ASTM D570 | 2.1 |

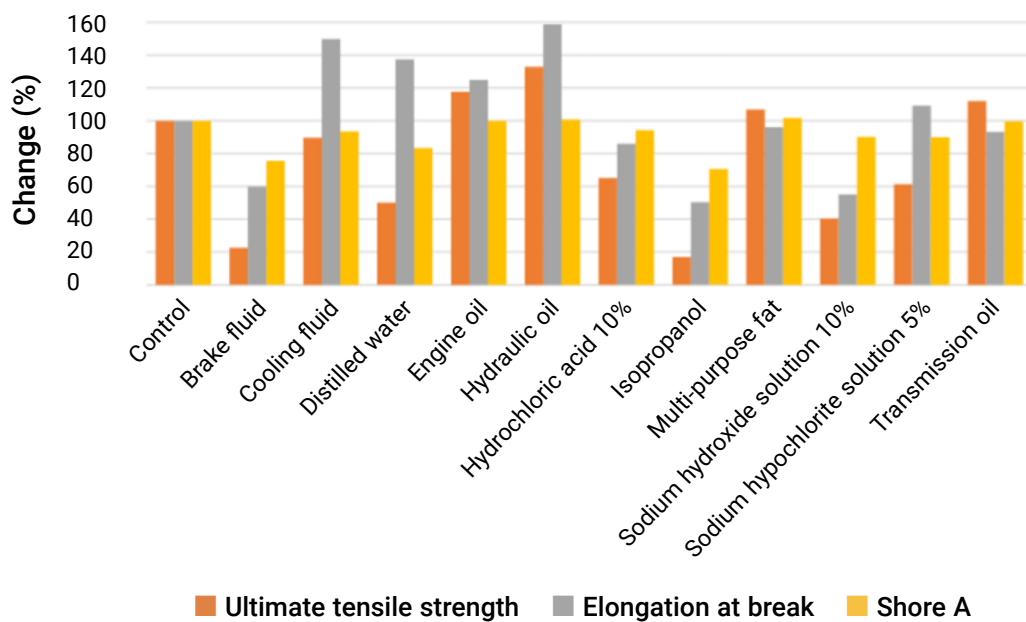


Chemical Resistance

Mechanical properties after 30 minutes

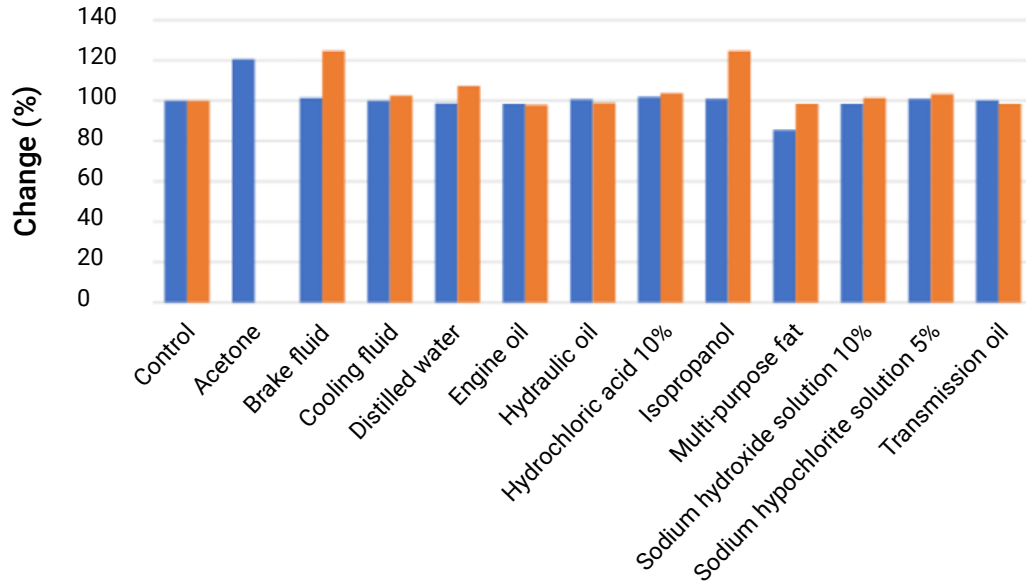


Mechanical properties after 7 days





Total weight change



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