formlabs 😿

100% Silicone 3D Printing for Soft, Pliable, and Durable Parts

Introducing Silicone 40A Resin, the first affordable 100% silicone 3D printing resin.

Eliminate molding and labor-intensive casting processes: Formlabs' new patent-pending

Pure Silicone Technology™ uses the streamlined Form 3+ ecosystem to 3D print 100%

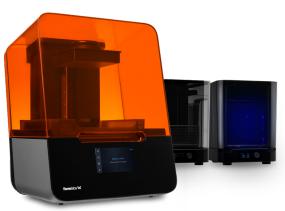
silicone parts in-house, in a matter of hours.





Outstanding Elastomeric Performance of Silicone

A pure silicone, without added monomer or acrylate, comparable to cast silicone.



Fast and Easy Fabrication, Without Tooling

Enabled by Formlabs' patent-pending Pure Silicone Technology™ and the Form 3+ ecosystem. [With Silicone 40A Resin] I can come up with a different idea, make a modification, and print it overnight. The next day I can come in, take it off, clean it up, and try it in the pool right away. So what used to take weeks, I can now do in hours.

Outsourcing urethane casting

2-3 weeks

\$1220 for 1 set of 2 gaskets

3D printing in-house with Silicone 40A Resin

8 hours

\$10 for each gasket



David Beittel, Senior Designer at FINIS, Inc.

Whether you are looking to fabricate functional prototypes, beta and validation units, flexible fixtures and molds, or low-volume production of end-use parts, Silicone 40A Resin allows you to create high-performance silicone parts on demand, without the design constraints, lead time, and costs of casting or molding.

Soft and Pliable

Choose Silicone 40A Resin to fabricate soft parts with excellent elasticity.

40A Shore Durometer Rebound Resilience: **34** %

Design Freedom

Benefit from the flexibility of 3D printing to expand design complexity and unlock customization.

Minimum Negative Feature Size: **0.3 mm**Minimum Positive Feature Size: **0.5 mm**

Extremely Durable

Parts printed with Silicone 40A Resin can withstand repeated cycles of stretching, flexing, and compression without tearing, just like cast silicone parts.

Tear Strength: 12 kN/m Elongation at Break: 230 % Ross Flex > 500,000 Cycles

Temperature and Chemical Resistant

Build watertight and chemical-resistant parts that can operate in high temperatures. For in-field testing, urethane or epoxy casting, and even end-use parts production, our material can undergo the most demanding environments.

Temperature Range: -25 °C to 125 °C Glass Transition Temperature: -107 °C

Consider using Silicone 40A Resin for



Seals, gaskets, grommets, connectors, and dampeners for automotive, robotics, and manufacturing.



Medical device components, patient-matched prosthetics and audiology applications



Wearables, handles, and grippers for consumer products.



Flexible fixtures, masking tools, and soft molds for casting urethane or epoxies.

Disclaimer: We are currently awaiting TSCA registration. Until we obtain this registration, Silicone 40A Resin can only be used for research and development (R&D) purposes. We expect to receive TSCA registration in late 2023. Once we receive the registration, this resin can be used for commercial, R&D, and any other suitable applications.

Get started now.

The Formlabs 3D printing ecosystem is waiting for you.







