

3D PRINT WITH EVOLV3D™ LC 3335 LIQUID SILICONE RUBBER





LATEST PRODUCTS AND TECHNICAL SERVICES AVAILABLE FROM RDABBOTT

Our lab is now equipped with a revolutionary, patent-pending Liquid Additive Manufacturing (LAM) 3D printer from German RepRap GmbH to assist with design proofs and functional prototypes using EVOLV3DTM LC 3335 Liquid Silicone Rubber from Dow Performance Silicones.

3D printable EVOLV3D™ LC 3335 Liquid Silicone Rubber was formulated specifically for designers seeking to combine the performance benefits of silicone with the design and processing advantages of their additive manufacturing process.

BENEFITS

- Significantly reduce cost and save time for prototype parts and multiple iterations
- Speed up time-to-market
- Easily produce individualized parts

TYPICAL APPLICATIONS

- Prototype parts for small manufacturing trials
- Customized parts
- Complex parts
- New designs

TYPICAL PROPERTIES*

TEST'	PROPERTY	UNIT	MOLDED (No Postcure)²	3D PRINTED ³ (No Postcure)	3D PRINTED ³ (Postcured) ⁴
ASTM D2240	Durometer Hardness	Shore A	51	44	46
ASTM D412	Elongation	%	540	480	410
ASTM D412	Tensile Strength	MPa	9	9.5	10
ASTM D624 B	Tear Strength	kN/m	45	45	40

HOW THE PRINTER WORKS

The LAM 3D Printer developed by German RepRap GmbH prints successive layers of EVOLV3D™ LC 3335 Liquid Silicone Rubber in a method comparable to the fused filament fabrication (FFF) process.

Each layer of silicone is fully cross-linked through thermal cure to enable parts with mechanical properties that are comparable to molded components.



TO LEARN MORE CONTACT US AT INFO@RDABBOTT.COM OR (562) 944-5354.

ASTM: American Society for Testing and Materials. Materials were tested according to Dow Corning Corporate Test Methods (CTM) which in most cases are similar to the ASTM standard(s) listed above. Copies of CTMs are available upon request. ²Cure conditions: 10 minutes at 120°C. ³Cure conditions: 3D printed via German RepRap GmbH LAM printing tool; variations in printing conditions may occur. ⁴Postcure conditions: 4 hours at 200°C. *These values are not intended for use in preparing specifications.