



Technical Data Sheet

EVOLV3D™ LC 3335 Liquid Silicone Rubber

50 Shore A hardness, 1 to 1 mix (Part A and B) liquid silicone rubber designed for Liquid Additive Manufacturing (LAM) 3D Printing. Combines the performance benefits of silicone rubber with the design and processing advantages of additive manufacturing.

Features & Benefits

- 50 Shore A Hardness
- Low Viscosity
- Unique Rheology
- Allows Part Design Flexibility
- Enables to achieve mechanical properties closely matching those of molded liquid silicone rubber (LSR)
- Direct transfer into high-volume injection molding processes
- High performance silicone elastomer parts – customized and/or new design

Composition

- EVOLV3D™ LC 3335 Liquid Silicone Rubber Part A
- EVOLV3D™ LC 3335 Liquid Silicone Rubber Part B

Applications

- Preparation of silicone rubber prototypes with properties that are comparable to injection molded components
- Low-volume or highly customized manufacturing of complex parts
- New design options in automotive, consumer care, cookware, lighting and other applications where traditional LSRs are used

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result ²	Result ³	Result ⁴
ASTM D2240	Durometer Hardness ⁵	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
ASTM D792	Specific Gravity		1.12		
CTM 1094	Viscosity Part A (10s ⁻¹)	Pa.s	158		
	Viscosity Part B (10s ⁻¹)	Pa.s	159		

¹ASTM: American Society for Testing and Materials

CTM: Corporate Test Method; copies of CTMs are available on request.

²Cure condition: 10 minutes at 120°C

³3D printed (Nozzle diameter 0.4 mm), variations in printing conditions may occur

⁴3D printed (as in 3) and post-cured; Post-cure conditions: 4 hours at 200°C

⁵For 3D printed parts hardness measurement taken on 3 x 2 mm thick plates.

UNRESTRICTED – May be shared with anyone

©™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

EVOLV3D™ LC 3335 Liquid Silicone Rubber

© 2017 The Dow Chemical Company. All rights reserved.

Description	EVOLV3D™ LC 3335 Liquid Silicone Rubber is developed to give excellent additive manufacturing process performances due to its improved rheology.
How To Use	EVOLV3D LC 3335 Liquid Silicone Rubber A and B components are supplied, strained and de-aired to be used as lot matched kits. Mix parts A and B in a 1:1 ratio. Meter mix equipment which pumps, meters and mixes the two components without incorporation of air is strongly recommended for production. If air bubbles are entrapped during mixing the mixture must be thoroughly de-gassed under vacuum.
Handling Precautions	PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM , OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.
Usable Life And Storage	When stored at or below 35°C (95°F) in original, unopened containers this product has a usable life of 15 months from the date of production.
Packaging Information	This product is supplied in lot matched kits (2 x 20 kg pail, and 2 x 600 ml cartridges).
Limitations	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.
Health And Environmental Information	To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area. For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

<http://www.consumer.dow.com>

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

