

**Technical Data Sheet** 

## SILASTIC<sup>™</sup> 3D 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 • SILASTIC™ 3D 3335 Liquid Silicone Rubber Part A

SILASTIC<sup>™</sup> 3D 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	Property	Unit	Result <sup>2</sup>	Result <sup>3</sup>
ASTM <sup>1</sup> D2240	Durometer Hardness <sup>4</sup>	Shore A	44	46
ASTM D412	Elongation	%	480	410
ASTM D412	Tensile Strength	MPa	9.5	10
ASTM D624 B	Tear Strength	kN/m	45	40
ASTM D792	Specific Gravity		1.12	
CTM <sup>5</sup> 1094	Viscosity Part A (10s-1)	Pa.s	158	
	Viscosity Part B (10s-1)	Pa.s	159	

<sup>1</sup>ASTM: American Society for Testing and Materials.

<sup>2</sup>3D printed (Nozzle diameter 0.4 mm), variations in printing conditions may occur

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

<sup>4</sup>For 3D printed parts hardness measurement taken on 3 x 2 mm thick plates.

<sup>5</sup>CTM: Corporate Test Method, copies of CTM's are available on request.

Description	SILASTIC <sup>™</sup> 3D 3335 Liquid Silicone Rubber is developed to give excellent additive manufacturing process performances due to its improved rheology.	
How To Use	SILASTIC <sup>™</sup> 3D 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 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 $35^{\circ}$ C ( $95^{\circ}$ 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 205 kg drums, 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, consumer.dow.com or consult your local Dow representative.	

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