

LOCTITE®



DURA56

Black

Developed on and certified for the
Origin® One 3D printers

LOCTITE®

Henkel Corporation

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DURA56 BLACK



DURA56

DURA56 is a tough, high-impact photopolymer with excellent surface quality. For functional end-use parts and prototypes

Created by Strataysys and LOCTITE to address end-use and prototyping applications with high material consumption. Ideal for housings, parts with mating features or class A surfaces..



Benefits:

- High-impact strength
- Tough
- Excellent surface finish
- Low part cost
- Low Viscosity



Ideal for:

- Enclosures and Housings
- Jigs & Fixtures
- Functional testing



Markets:

Industry	Automotive	Consumer Goods

42 MPa

*Tensile
Stress
at Break*

1,600 MPa

*Young's
Modulus*

78 %

*Elongation
at Break*

56 J/m

*Impact
Strength*

52 °C

*HDT at
0.455
MPa*



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PHYSICAL PROPERTIES

Mechanical Properties	Measure	Method	Green	Post Processed
Tensile Stress at Break	MPa	ASTM D638	34.1 ± 1.3 [9]	42.2 ± 1.5 [1]
Tensile Stress at Yield	MPa	ASTM D638	42.3 ± 0.5 [9]	44.1 ± 1.6 [1]
Young's Modulus	MPa	ASTM D638	1541 ± 28 [9]	1595 ± 63 [1]
Elongation at Break	%	ASTM D638	63 ± 20 [9]	78 ± 8 [1]
Other Properties				
IZOD Impact (Notched)	J/m	ASTM D256	-	55 ± 6 [3]
HDT at 0.455 MPa	°C	ASTM D648	-	52 [4]
Shore Hardness (3s)	D	ASTM 2240	-	64 [8]
Water Absorption (24 hr)	%	ASTM 570	-	3 [5]
Water Absorption (168 hr)	%	ASTM 570	-	7 [5]
Thermal Conductivity	mW/(m·K)	ASTM D5930	-	211 [11]
Heat Capacity	J/(g·K)	ASTM D5930	-	1.46 [11]

Liquid Properties	Measure	Method	Value
Viscosity at 25°C (77°F)	cP	ASTM D7867	920 [6]
Liquid Density	g/cm ³	ASTM D1475	1.13 [7]

All specimen are printed unless otherwise noted. All specimen were conditioned in ambient lab conditions at 19-23°C / 40-60% RH for at least 24 hours. ASTM Methods: D638 Type IV, 50mm/min, D790-B, 2 mm/min, D648, D256 Notched IZOD (Machine Notched), 6 mm x 12 mm, D570 0.125" x 2" Disc 24hr@ 25°C, D2240, Type "D" (3 seconds), D7867, D1475

Internal Data Sources:

[1] FOR24710, [2] FOR25133, [3] FOR24464, [4] FOR25135, [5] FOR24474, [6] FOR24493, [7] FOR24477, [8] FOR24476, [9] FOR24885, [10] FOR25132, [11] FOR39791



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