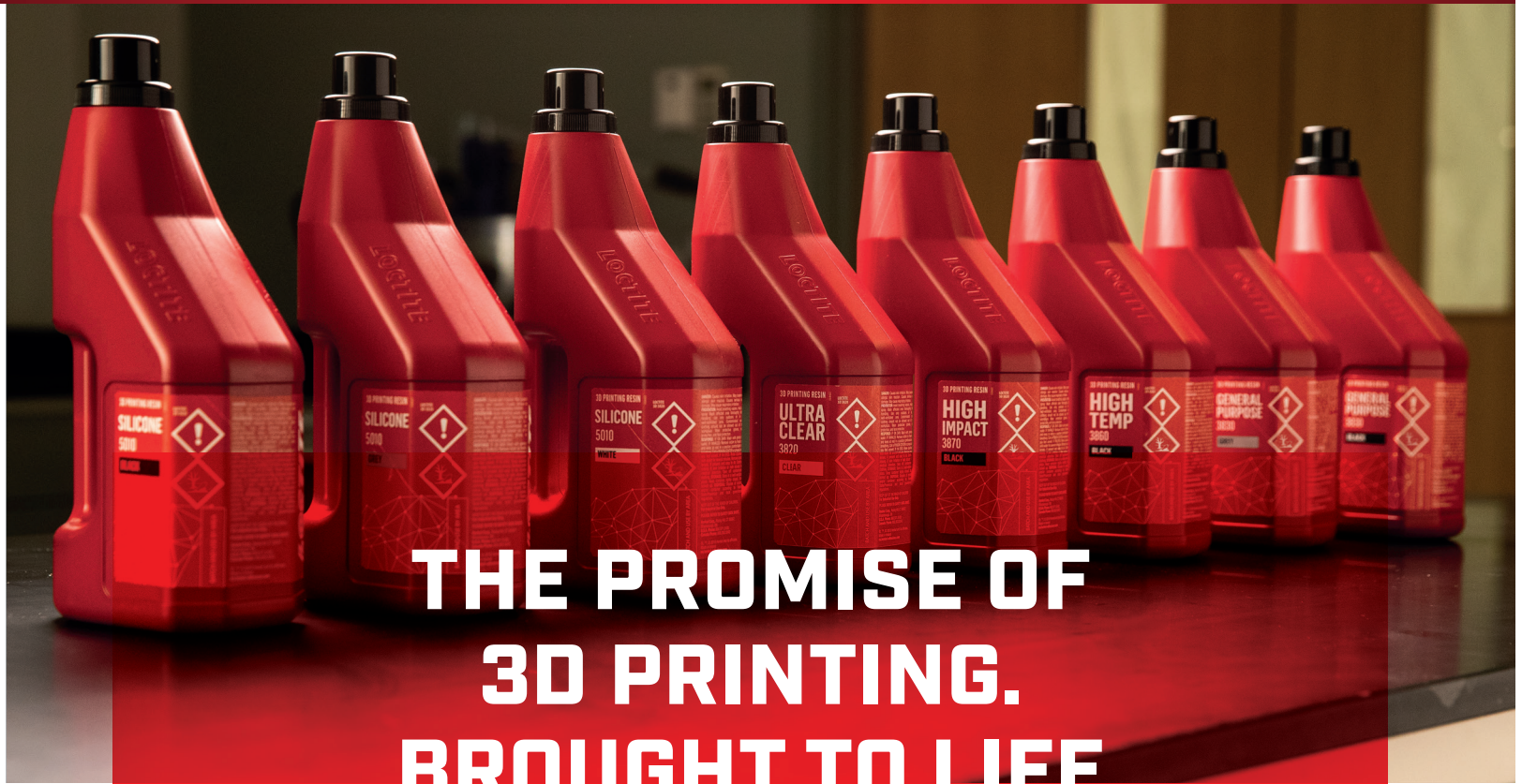


LOCTITE®



THE PROMISE OF 3D PRINTING. BROUGHT TO LIFE BY LOCTITE.

New Additive Manufacturing Resins Make the Promise
of 3D Printing More Real Than Ever Before.

Until now, the realities of 3D printing have not lived up to its promise. Materials have been limited, which limits design, and true functional prototyping has been difficult to achieve.

LOCTITE's new 3D portfolio of resins, post-processing solutions, equipment and printers addresses those shortcomings. It expands the available materials for 3D printing – and the properties they possess. It allows you to create truly functional parts, across a wider range of applications. It opens up truly limitless design possibilities.



Henkel

Differentiated Resins for True Functional Parts

LOCTITE brings the promise of 3D printing to life with a new line of additive manufacturing resins that are years ahead of the rest of the market. Each is low viscosity and printable at room temperature across various SLA and DLP Platforms.

LOCTITE 3D Printing Silicone Elastomeric 5010/5015

A low viscosity, high performance silicone that cures into a tough silicone elastomer. Can be used across various SLA/DLP platforms.

	DESCRIPTION	LOCTITE SI 5010 ^{1,2}	LOCTITE SI 5015 ^{1,2}
Chemistry		Light Cure Silicone	Light Cure Silicone
Printability		SLA/DLP	SLA/DLP
Color		Clear, White, Black	Clear, White, Black
Hardness, Shore A	ASTM D2240	50-60	75-80
Tensile Strength at Break	ASTM D412	3,5-4,5 N/mm ²	6,5-8,5 N/mm ²
Elongation at Break	ASTM D412	180-190 %	150-180 %

For further information please see TDS, contact Technical Service Centre or Customer Service Representative.

¹ Preliminary data

² All data after post-cure in accordance with TDS

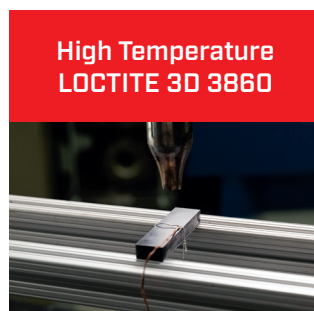
LOCTITE 3D Printing General Purpose 3830/3840

A light curable acrylic resin that is suitable for prototyping parts.

	DESCRIPTION	LOCTITE 3D 3830 ²	LOCTITE 3D 3840 ²
Color		White, Grey, Black, Clear	White, Grey, Black, Clear
Tensile Strength at Break	ASTM D638	40-55 MPa	20-30 MPa
Elongation at Break	ASTM D638	3-5 %	15-20 %
Comments		HDT 65 °C Exceptional Print Accuracy	Flexibility for Snap Fit Parts

For further information please see TDS, contact Technical Service Centre or Customer Service Representative.

² All data after post-cure in accordance with TDS



3D Printing – Additive Manufacturing Resins



LOCTITE 3D Printing Durable High Impact 3870

Flexible resin specifically designed for durability and impact resistance.

	DESCRIPTION	LOCTITE 3D 3870 ²
Color		Black
Elongation at Break	ASTM D638	68–75 %
Tensile Young's Modulus	ASTM D638	695–760 MPa
Tensile Strength at Break	ASTM D638	18–21 MPa
Notched IZOD	ASTM D256 Method A IZOD Impact Resistance	60–80 J/m

For further information please see TDS, contact Technical Service Centre or Customer Service Representative.

² All data after post-cure in accordance with TDS

LOCTITE 3D Printing High Temp 3860

Exhibits high heat deflection temperature (HDT) and good print resolution.

	DESCRIPTION	LOCTITE 3D 3860 ²
Color		Black
Elongation at Break	ASTM D638	1–2 %
Tensile Young's Modulus	ASTM D638	3,0–4,0 GPa
Tensile Strength at Break	ASTM D638	37–41 MPa
Heat Deflection Temperature at 0,45 MPa	ASTM D648	180–190 °C

For further information please see TDS, contact Technical Service Centre or Customer Service Representative.

² All data after post-cure in accordance with TDS

LOCTITE 3D Printing Ultra Clear 3820

Offers excellent print resolution and high clarity.

	DESCRIPTION	LOCTITE 3D 3820 ²
Print Appearance Transparency	% Value of Visible Light Through a 3D Printed Object (standard 7,0 mm block)	80–90 %
Tensile Young's Modulus	ASTM D638	0,9–1,1 GPa
Tensile Strength at Break	ASTM D638	18–28 MPa
Elongation at Break	ASTM D638	26–46 %
Notched IZOD	ASTM D256 Method A IZOD Impact Resistance	31–37 J/m

For further information please see TDS, contact Technical Service Centre or Customer Service Representative.

² All data after post-cure in accordance with TDS



PR10.1 Resin 3D Printer. **Accurate, Flexible and Fast.**

Our large format DLP 3D industrial printer offers exceptional accuracy and can be used with any of our new additive manufacturing resins, as well as a wide variety of other 3D printing resins. The large build platform allows manufacturing of an entire range of components, fast build speeds and production of multiple components at the same time without influencing build speed.



CL36 LED Curing Chamber. **Uniform Curing for a Professional Result.**

Optimize the post-processing of your 3D printed resins with this all-new, state-of-the-art UV curing station. Specifically designed and engineered for parts printed with LOCTITE resin, it is equipped with low heat emission LED that provide a life span of up to 20.000 hrs. It is easy to use and adjust with a single touchscreen. An automatic rotary table ensures uniform curing.



Bonding Solutions. **Reduced Process Cost and Increased Part Value.**

Bonding 3D printed parts with LOCTITE 3D Printing Universal Bonder and LOCTITE 3D Printing Instant Bonder offers a number of advantages, from greater design flexibility by assembling dissimilar substrates with various tolerances to producing bigger parts by joining subcomponents afterwards for print optimization. Perfect for bonding not only prototyping parts but also for small series production for the most known 3D Printing technologies, including SLA/DLP, SLS, MJF, CLIP and FFF.



- **LOCTITE 3D Printing Universal Bonder 11 g:**
 - Suitable for bonding parts with gaps up to 5 mm
 - Cures in 3 minutes
- **LOCTITE 3D Printing Instant Bonder 50 g:**
 - Suitable for fast assembly of parts with minimum or zero gap

Germany

Tel.: +49 89 320 800 1600
Email: technischer.service@henkel.com

Switzerland

Tel.: +41 61 825 7000
Email: technischer.service@henkel.com

UK & Ireland

Tel.: +44 1442 278100
Email: technical.services@henkel.com

China

Tel.: +86 400 821 2567
Email: technicalservice.china@henkel.com

Netherlands

Tel.: +31 30 607 38 52
Email: tech.bnl@henkel.com

Belgium

Tel.: +32 2 421 2611
Email: tech.bnl@henkel.com

USA

Tel.: +1-800-Loctite (800-562-8483)
Email: tech.services@henkel.com

The data contained herein are intended as reference only. Please contact Henkel Technical Support Group for assistance and recommendation on specifications for these products.

Except as otherwise noted, all marks used above in this printed material are trademarks and/or registered trademarks of Henkel and/or its affiliates in the US, Germany, and elsewhere. © Henkel AG & Co. KGaA, 2019

