

**LOCTITE**®

**nexa3D**®

**xPRO410**

**High Accuracy Rigid Photoplastic**

**Nexa3D**  
1923 Eastman Ave, Suite 200  
Ventura, CA 93003



08/27/2020

v1.0

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# xPRO410

## Description

Nexa3D xPRO410 is a fast printing, rigid photopolymer that can be printed with very high resolution features. Formulated with exceptional surface finish and extremely high print accuracy. IND410 exhibits dimensional accuracy of within 0.2% <sup>13</sup> after post curing. This product is perfect for printing accurate prototypes, that will be exposed to temperatures up to 70°C. Accuracy, combined with high HDT, makes this product ideal for consumer goods functional prototyping and small series production.

Available Color: Black

Mechanical Properties *	Method	Green	LED 405nm Post Cured
Tensile Strength at Break	ASTM D638	20.71 MPa <sup>1</sup>	41.6 MPa <sup>2</sup>
Young's Modulus	ASTM D638	796 MPa <sup>1</sup>	2365 MPa <sup>2</sup>
Elongation at Failure	ASTM D638	14.05 % <sup>1</sup>	5.46 % <sup>2</sup>
<b>Other Properties</b>			
IZOD Impact Strength (Notched)	ASTM D256	-	25 J/m <sup>4</sup>
HDT @ 0.455 MPa	ASTM D648	53 °C <sup>6</sup>	61 °C <sup>7</sup>
Shore hardness (Durometer)	ASTM D2240	69 D <sup>9</sup>	79 D <sup>10</sup>
Dimensional Stability (green - post cure)	Internal		0.28
<b>Liquid Properties</b>			
Viscosity @ 25°C (77°F)	400-600 cP <sup>12</sup>		

"All specimen are printed unless otherwise noted. All specimen were conditioned in ambient lab conditions at 19-23C / 40-60% RH for at least 24 hours." ASTM Methods: D638 Type V, 10mm/min.D256 Notched IZOD (Machine Notched), D648; D2240, Type "D" (0, 3 seconds);

\* Based on testing carried out by Henkel. This information is representative only. Contact your Nexa3D Technical Service Team for further information.

1. Task FOR20868
2. Task FOR20350
3. Task FOR20930
4. Task FOR20317
5. Task FOR21384

6. Task FOR21754
7. Task FOR20352
8. Task FOR20878
9. Task FOR 21415
10. Task FOR21413

11. Task FOR21416
12. Task FOR17012
13. Task FOR20921 FOR22780 FOR20117

# xPRO410

## Biocompatibility

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Safe to Touch. Classified as non-irritant in -23. Not submitted for any further testing

## Post Processing

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Nexa3D xPRO410 requires post processing to achieve specified properties. Contact your Nexa3D Technical Service Team for further information.

## Post Curing

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## Note

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The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Nexa3D is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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**NOTE:** Results may vary depending user workflow and geometry. Validation of final part is recommended.