

LOCTITE[®]

nexa3D[®]

xPRO410

High Accuracy Rigid Photoplastic

Nexa3D
1923 Eastman Ave, Suite 200
Ventura, CA 93003



08/27/2020

v1.0

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%¹³ 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 ¹	41.6 MPa ²
Young's Modulus	ASTM D638	796 MPa ¹	2365 MPa ²
Elongation at Failure	ASTM D638	14.05 % ¹	5.46 % ²
Other Properties			
IZOD Impact Strength (Notched)	ASTM D256	-	25 J/m ⁴
HDT @ 0.455 MPa	ASTM D648	53 °C ⁶	61 °C ⁷
Shore hardness (Durometer)	ASTM D2240	69 D ⁹	79 D ¹⁰
Dimensional Stability (green - post cure)	Internal		0.28
Liquid Properties			
Viscosity @ 25°C (77°F)	400-600 cP ¹²		

"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

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

Post Processing

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

Post Curing

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

xPRO410

Note

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.

The following Disclaimers may apply depending on country of delivery:

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law. In case Nexa3D would be nevertheless held liable, on whatever legal ground, Nexa3D's liability will in no event exceed the amount of the concerned delivery.

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Nexa3D Inc. specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Nexa3D products. Nexa3D specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Nexa3D or Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of either Nexa3D or Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

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