

# Technical Data



BR3DGY01-DLP-UV-HTENSILE  
UV DLP High Tensile  
High Tensile 3D polymers

## SPECS

### FEATURES

Photocentric's range of High Tensile UV DLP photopolymers are ideal for making objects where you want a hard object with high tensile strength. Objects cannot be bent or compressed easily. They exhibit very high tensile shear properties and limited elongation. UV DLP High Tensile provides excellent imaging in your desktop DLP printer. You will experience the benefits of fast exposure times and a wide exposure latitude, allowing you to hold the finest details your machine can provide. The solid material is strong, durable, and long lasting provided it is stored in dry conditions away from strong UV light.

### PROCESSING INSTRUCTIONS

Follow the procedures laid out in your 3D DLP printer user manual. Polymer should be poured into the tray away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. Liquid polymer is soluble in water and soap. After making cleaned objects surface tack can be removed by leaving under water in UV for 20 minutes or longer. If any surface tack persists you can remove it by wiping the parts with IPA.

### DATA

|  |                        |
|--|------------------------|
| <b>Viscosity</b><br><small>(At 25°C Brookfield spindle 3)</small>          | 510 cPs                |
| <b>Hardness</b><br><small>(After post exposure)</small>                    | 80 Shore D             |
| <b>Tensile strength</b><br><small>ASTM D638 (After post exposure)</small>  | 65 MPa                 |
| <b>Tensile strength</b><br><small>ASTM D638 (Before post exposure)</small> | 22 MPa                 |
| <b>Elongation at break</b><br><small>ASTM D638</small>                     | 4%                     |
| <b>Heat deflection temp</b><br><small>ASTM D648</small>                    | 63°C                   |
| <b>Storage</b>   | 10<t>50°C              |
| <b>Density</b>   | 1.16 g/cm <sup>3</sup> |

### AVAILABLE COLOURS

Grey

Available in 1kg bottles with non-drip cap.