

# Magigoo Pro 3D Printing Adhesive for Polycarbonate Technical Data Sheet\*

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\*This document has been conscribed to the best of our knowledge. Verifications should be made to confirm details when necessary.

**magigoo**  
magigoo.com

## **Description:**

MAGIGOO® - Polycarbonate, is an all-in-one 3D printing adhesive that offers sure adhesion with easy release for polycarbonate based filaments. Magigoo Polycarbonate, has been specifically formulated for polycarbonate filaments to ensure that it provides an easy to use solution to reduce warping in FDM/FFF 3D printers. Warping, among other factors, is caused by the differential cooling of a print during the 3D printing process, especially on higher temperature filaments such as polycarbonate. A heated bed could help reduce warping but for printing repeatability and reliability and sure adhesion, MAGIGOO® - Polycarbonate is needed.

## **Technical specifications:**

- ▶ **Appearance:** clear-faint yellow liquid
- ▶ **Consistency:** low viscosity
- ▶ **Solvent:** water
- ▶ **Decomposition:** Extended periods exceeding  $\geq 130$  °C

## **Intended use:**

To be used on FDM/FFF 3D printers with a heated bed on glass surfaces. Also works when applied on sheets e.g. Kapton, PEI and similar. To be used with Polycarbonate plastics only.

## **Properties:**

MAGIGOO® - Polycarbonate, acts as a thermally activated interfacial layer, allowing for better interactions, both at the micro and molecular level, between the printing bed and the printing materials. It is generally recommended to print according to the printing temperatures recommended by the filament supplier. The printing conditions vary between one printer and another.

To find the best temperature one could start from the lower end of the recommended settings and increase the bed temperature in 5 °C increments. This should be done with standardised calibration prints.

An additional benefit of MAGIGOO® - Polycarbonate, being thermally activated, is that it will release the print upon cooling. Again, different printers, print surfaces or filaments will have slightly different released conditions but as a general rule a reduction in temperature of 30-40 °C will be sufficient to remove your prints without any effort.

The best and most reliable performance is achieved when applied as a thin layer. This means that cleaning and re-applying between prints is recommended especially on longer prints or hard to print with materials.

### **Storage and Handling:**

MAGIGOO® - Polycarbonate, should be stored in a cool dry place away from direct sunlight. After use MAGIGOO® - Polycarbonate should be stored in an upright position and with the cap on.

Excess MAGIGOO® - Polycarbonate on the nib can cause the applicator adhering to the cap. To prevent this, make sure no excess MAGIGOO® - Polycarbonate remains on the rim of the applicator after use. If not capped the MAGIGOO® - Polycarbonate applicator will dry up. In such a case just rinse with water.

## Application Method:

<p><b>Step 1:</b> Shake the bottle vigorously.</p>	
<p><b>Step 2:</b> Press nib against the surface.</p> <p>NB! The Magigoo – Polycarbonate container is spring activated. Pressing the bottle without pressing the nib against the bed may result in applicator popping off and product wastage.</p>	<p>Spring activated valve inside</p>
<p><b>Step 3:</b> Apply to Desired area</p>	
<p><b>Step 4:</b> Print</p> <p>NB! Ensure proper bed calibration. Having nozzle too close to bed surface may cause excess adhesion damaging the bed.</p> <p>After printing, wait until the build plate is cool to remove prints easily.</p>	
<p><b>Step 5:</b> Clean</p> <p>NB! Just wipe off with a damp (water) cloth.</p>	

\* Images are illustrative.