

Magigoo Pro 3D Printing Adhesive for Polyamide Technical Data Sheet*

Ver 1.5 February 2019



*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® - PA (Polyamide/Nylon), is an all-in-one 3D printing adhesive that offers sure adhesion with easy removal for PA and fibre reinforced PA materials. MAGIGOO® - PA, has been specifically formulated for PA and fibre reinforced PA materials 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 cool of a print during a 3D printing process. MAGIGOO® - PA is purposely developed to reliably and repeatably minimise warping during FDM/FFF printing of PA materials.

Technical specifications:

- ▶ **Appearance:** clear-faint yellow liquid
- ▶ **Consistency:** low-med viscosity
- ▶ **Solvent:** water
- ▶ **Decomposition:** extended period exceeding ≥ 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 neat PA and fibre reinforced PA filaments.

Properties:

MAGIGOO® - PA, 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® - PA, being thermally activated, is that it will enable the print to be easily removed upon cooling. Again, different printers, print surfaces or filaments will behave slightly different but as a general rule a reduction in temperature of around 40 °C will be sufficient to remove your prints without any effort.

Cleaning and re-applying between prints is recommended especially on longer prints or hard to print with materials.

Storage and Handling:

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

Excess MAGIGOO® - Polyamide on the nib can cause the applicator adhering to the cap. To prevent this, make sure no excess MAGIGOO® - PA remains on the rim of the applicator after use.

If not capped the MAGIGOO® - PA applicator will dry up. In such a case just rinse with water.

Application Method:

* Images are illustrative.

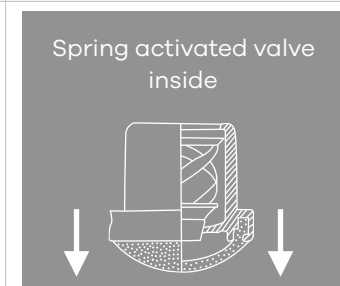
Step 1: Shake the bottle vigorously.

NB! Shaking too much might cause bubbling. This does not negatively affect adhesion but does not provide a mirror finish on the bottom of the print



Step 2: Press nib against the surface.

NB! The Magigoo – PA container is spring activated. Pressing the bottle without pressing the nib against the bed may result in applicator popping off and product wastage.



Step 3: Apply liberally to desired area

NB! For better adhesion of challenging prints, apply one layer first. Let it dry and apply another layer on top.



Step 4: Print

NB! After print, wait until the build plate is cool to remove prints easily.



Step 5: Clean

NB! Just wipe off with a damp cloth. Use just water.

