Magigoo Pro 3D Printing Adhesive for Glass Filled Polypropylene

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.

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Description:

MAGIGOO® - Glass filled Polypropylene (Magigoo-PPGF), is an all-in-one 3D printing adhesive that offers strong adhesion platform for glass filled polypropylene based filaments. Magigoo - PPGF is an easy to use 3D printing adhesive designed to reduce warping in FDM/FFF 3D printer. Warping, among other factors, is caused by the differential cooling of a print during a 3D printing process. For printing repeatability and reliability a sure adhesion method such as Magigoo - PPGF is needed

Technical specifications:

- **Appearance:** milky white liquid
- **Consistency:** low-med viscosity
- **Solvent:** water

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 glass filled polypropylene plastics.

Properties:

Magigoo-PPGF 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.

Additionally Magigoo – PPGF, is temperature sensitive, in that it will reduce its adhesive properties upon cooling. Different printers, print surfaces or filaments will have slightly different release conditions.

The best and most reliable performance is achieved when Magigoo PPGF is applied generously. Furthermore cleaning and re-applying between prints is recommended since the integrity of the adhesive layer is compromised on print removal.

MAGIGOO
Thought3D Ltd, Unit2150, KBIC, Kordin Industrial Estate
Paola, PLA3000, Malta

info@magigoo.com
www.magigoo.com

Storage and Handling:

Magigoo – PPGF should be stored in a cool dry place away from direct sunlight. After use Magigoo - PPGF should be stored in an upright position and with **the cap on**.

Excess adhesive on the nib can cause the applicator adhering to the cap. To prevent this, make sure no excess Magigoo - PPGF remains on the rim of the applicator after use.

Known Hazards:

Causes serious eye damage Wash hands and exposed skin thoroughly after handling. Wear protective gloves.

Incompatible materials: Iron, Copper, Zinc.

Please refer to the SDS for full safety information.

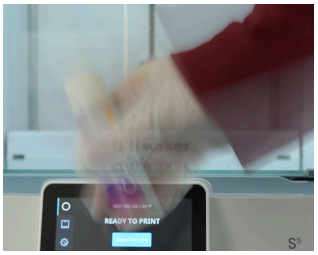
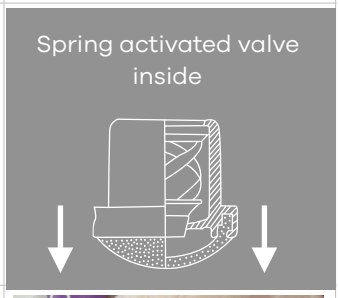
Recommended print settings on the Ultimaker S5

The table below shows the modified settings for XSTRAND™ GF30-PP by Owens Corning on Ultimaker S5.

Setting	Modified Value
Bed temperature initial layer (°C)	100
Bed temperature default (°C)	20
Brim width (mm)*	20
***We strongly recommend that a single layer 20 mm brim is used with this adhesive for GF30PP filament for optimum results and minimal warping.**	

Application Method:

* Images are illustrative.

Step 1: **Shake the bottle.**	
Step 2: **Press nib against the surface.** NB! The Magigoo – PPGF 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 to Desired area**	
Step 4: **Print** **Use recommended print settings (page 2).** NB! After print, heat the build plate to 70-90 °C to help with part removal since the adhesive layer is softer at higher temperatures. It is recommended to gently peel away the brim. If the part is hard to remove, a scraper should be used to assist part removal. In cases of excess adhesion, it is recommended to wet print bed with a small amount of water slowly working it below the part.	
Step 5: **Clean** NB! Use a wet sponge/cloth to remove all glue residue. Once the glue layer is wet it will form a white layer which can be easily scrubbed off with an abrasive sponge. Once the layer is completely loose from the glass it can be wiped away with a wet cloth and finally cleaned with a dry paper towel.