# Magigoo Pro High Temperature 3D Printing Adhesive Technical Data Sheet\*

Ver 1.0 August 2019



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

magigoo.com

# magig C

# **Description:**

MAGIGOO® - High Temperature, is an all-in-one 3D printing adhesive that offers sure adhesion with easy release for high temperature engineering filaments, with a specific focus on PEEK. Magigoo - High Temperature, has been specifically formulated for high temperature 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 high temperature filaments. For printing repeatability, reliability and sure adhesion, MAGIGOO® - High Temperature is needed.

# **Technical specifications:**

- Appearance: clear-faint yellow liquid
- Consistency: low viscosity
- Solvent: water
- Decomposition: Extended periods exceeding > 150 °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. High temperature Garolite, Kapton, PEI and similar. Magigoo High Temperature is tested to work to temperatures of 150 °C.

# **Properties:**

MAGIGOO® - High Temperature, 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.

# magig⇔

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

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

# magig $\subset$

# **Application Method:**

\* Images are illustrative.

Step 1: Shake the bottle vigorously.



#### Step 2: Press nib against the surface.

NB! The Magigoo – High Temperature 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

NB! Ensure proper bed calibration. Having nozzle too close to bed surface may cause excess adhesion damaging the bed.

After printing, wait until the build plate is cool to remove prints easily.



## Step 5: Clean

NB! Just wipe off with a damp (water) cloth.



MAGIGOO

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

info@magigoo.com www.magigoo.com

