

Technical Data Sheet

Glue



MAERTZ

Maertz Glue is an all-in-one 3D printing adhesive that offers sure adhesion with easy release. Maertz Glue is an easy to use 3D printing adhesive designed 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. A heated bed could help reduce warping but for printing repeatability and reliability a sure adhesion method is needed.

Technical specifications

- Appearance: clear-faint yellow liquid
- Odour: faint odour
- Consistency: low-med viscosity
- Solvent: water
- Decomposition: extended periods exceeding 120°C

Intended Use

To be used on FDM/FFF 3D printers with a heated bed on aluminium, glass surfaces. Also works when applied on sheets e.g. Kapton, PEI and similar. To be used with common plastics e.g. PLA, ABS, HIPS, PETG, TPU.

Properties

Maertz Glue 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 recommended to print according to the printing temperatures recommended by the filament supplier. The printing conditions vary between one printer and another. If no recommendations are given by the filament supplier the following bed temperatures can be followed:

Properties	
Filament	Bed temperature (°C)
ABS	90 – 110
PLA	40 – 70
PETG	80 – 100
HIPS	90 – 115
TPU	30 – 60

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 Maertz Glue, being thermally activated, is that it will release the print upon cooling. Different printers, print surfaces or filaments will have slightly different released conditions but as a general rule a reduction in temperature by 30 – 40°C will be sufficient to remove your prints without any effort.

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If the material you are trying to print with is not specifically described in the table above it means we have either found that the results are not up to our standards or we have not conducted enough tests to assure its efficacy. There are other specialty Maertz Glue formulations for adhering engineering plastics such as Polycarbonate and Polypropylene should these materials be of interest.



Storage & Handling

Maertz Glue should be stored in a cool dry place away from direct sunlight. After use Maertz Glue should be stored in an upright position and with the cap on. Excess Glue on the nib can cause the applicator adhering to the cap. To prevent this, make sure no excess Glue remains on the rim of the applicator after use. If not capped the Maertz Glue applicator will dry up. In such a case just rinse with water.