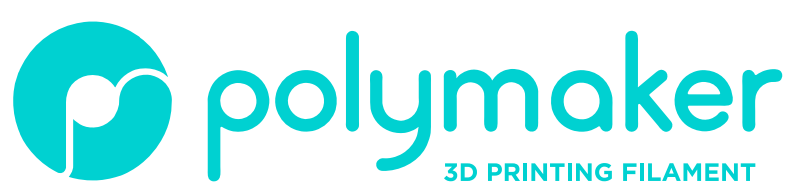


TECHNICAL DATA SHEET



V5.5



Polymaker™ PolyDissolve™ S1

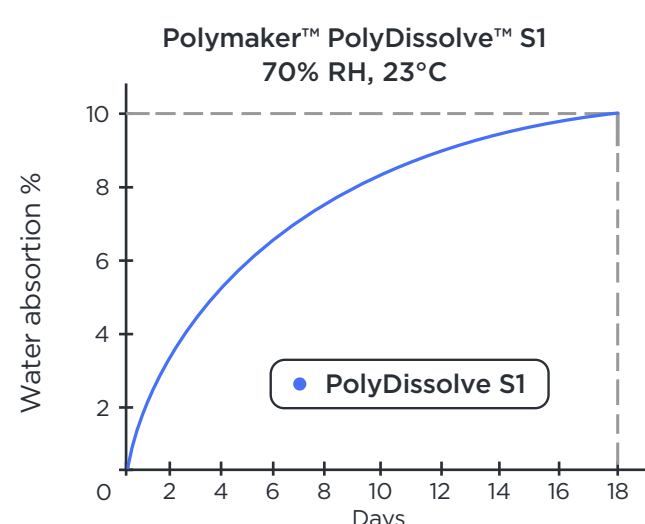
PolyDissolve™ S1 is a water dissolvable support for PLA, TPU, PVB and Nylon based filaments from our portfolio. It is specifically engineered to have a perfect interface with these materials while also displaying good solubility.

WWW.POLYMAKER.COM

PHYSICAL PROPERTIES

PROPERTY	TESTING METHOD	TYPICAL VALUE
Density	ISO1183, GB/T1033	1.13 g/cm ³ at 23°C
Melt index	210°C, 2.16kg	7.8 g /10min
Light transmission	N/A	N/A
Light transmission	N/A	N/A

MOISTURE ABSORPTION CURVE



CHEMICAL RESISTANCE DATA

PROPERTY	TYPICAL VALUE
Effect of weak acids	Poor
Effect of strong acids	Poor
Effect of weak alkalis	Poor
Effect of strong alkalis	Poor
Effect of oils and grease	N/A

Good:
Material may get minor attack after long periods of storage with chemical at ambient temperature

Fair:
Material can be used for short time contact with chemicals at ambient temperature

Poor:
Material becomes unstable on contact with chemical at ambient temperature

MATERIAL COMPATIBILITY

MATERIAL	ADHESION WITH POLYDISSOLVE™ S1
PLA based material from Polymaker's portfolio	supports the model very well
PETG based material from Polymaker's portfolio	generally, supports the model depending on its geometry
ABS based material from Polymaker's portfolio	generally, doesn't support the model depending on its geometry
PC based material from Polymaker's portfolio	generally, doesn't support the model depending on its geometry
PVB based material from Polymaker's portfolio	supports the model very well
TPU based material from Polymaker's portfolio	supports the model very well
Nylon based material from Polymaker's portfolio	supports the model very well



PolyDissolve™ S1
Store in the resealable bag



PolyBox™ or PolyDryer™ Box
Highly Recommended storage for excellent printing quality

RECOMMENDED PRINTING CONDITIONS

Nozzle temperature	215-225°C
Build plate temperature	25-60°C
Build surface treatment	PC and Textured PEI
Cooling fan	ON
Closure chamber	Not needed

Printing Speed	50-150mm/s
Drying temp. and time	80°C/12H
Retraction distance	1-3 (mm)
Retraction Speed	20-40 (mm/s)

*Based on 0.4mm nozzle. Printing conditions may vary with different nozzle diameters.

*Based on testing with Polymaker™ Matte PLA (SKU: PA04034)

DISCLAIMER

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice. Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Polymaker™ materials for the intended application. Polymaker™ makes no warranty of any kind, unless announced separately, to the fitness for any use or application. Polymaker™ shall not be made liable for any damage, injury or loss induced from the use of Polymaker™ materials in any application.