

TECHNICAL DATA SHEET

AquaSys® 12O Soluble Support for Additive Manufacturing

Rev 2: 8/27/19

Introducing High-Performance Soluble Support

AquaSys 12O is a patent-pending soluble support that can be used in conjunction with engineering thermoplastics in additive manufacturing processes. The support material is made of non-toxic ingredients and can be easily removed by exposure to warm water.



FEATURE	ADVANTAGE	BENEFIT
Temperature Resistance	Stable with build chamber temperatures of up to 120 °C.	Compatible with several engineering thermoplastics including: PETG, CPE, ABS, Nylon, PC, PC/ABS, TPU, PP and various filled materials.
Water Soluble	Rapidly dissolves in standard tap water at temperatures of 70-80 °C.	No additional chemicals or custom dissolution baths are required.
Adhesion	AquaSys 120 has excellent adhesion to a variety of build materials and build plates including PETG, CPE, Nylon, ABS, TPU, PC, PP and various filled materials.	Allows the production of more uniform parts with fewer defects.
Shrinkage	Very low shrinkage.	Support does not curl during printing.
Shelf Life	If properly stored, AquaSys 120 does not pick up significant moisture.	No unique handling or drying is required if properly stored and kept dry. Drying is required at 70-80°C if material picks up moisture.
PHYSICAL PROPERTIES		
24 hour moisture absorption @ 50% RH and 25 °C		0.3"%
Specific Gravity		1.32 g/cm3
Dissolution Rate @ 80 °C in water		15 min to dissolve 1cm cube
Typical printing conditions		220-245 °C extruder temperature Up to RT-130 °C build plate temperature 80-120 °C chamber temperature

MATERIAL SPECIFICATIONS

Standard Product Forms: 3 mm pellet, 1.75 mm and 2.85 mm filament

Color is natural amber color

Intentionally formulated using environmentally safe materials

Typical printing temperatures

GENERAL INSTALLATION, USAGE, AND CARE OVERVIEW

Storage and Preparation: Store AquaSys 120 in metallized foil packaging with desiccant. Reseal after use.

See MSDS/SDS for material handling.

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