

AquaSys® GP Soluble Support for Additive Manufacturing

Rev 1: 4/20/22

FEATURE	ADVANTAGE	BENEFIT
Temperature Resistance	Stable with build chamber temperature up to 30 °C and prints well at room temp.	Compatible with several thermoplastics including: PLA, PETG
Water Soluble	Rapidly dissolves in standard tap water at 25 °C.	No additional chemicals/custom dissolution baths are required.
Adhesion	AquaSys GP has excellent adhesion to a variety of build materials and build plates including glass, PC-ABS, PEI.	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 GP does not pick up significant moisture	No unique handling or drying is required if properly stored and kept dry. Drying is required at 40-50 °C if material picks up moisture.

PHYSICAL PROPERTIES	TYPICAL VALUE	UNITS	METHOD
24 hour moisture absorption	0.3-0.5%	@ 50% RH and 25 °C	
Specific Gravity	1.27	g/cm ³	ASTM D792
Coefficient Thermal Expansion	4.01E-05	in/in°C	ASTM D696
MECHANICAL PROPERTIES		UNITS	METHOD
Melt Flow Index (230C; 5kg)	45.0	g/10min	ASTM D1238
Tensile			ASTM D638
Modulus	875,000	psi	
Strength	13,000	psi	
Elongation @ Break	2	%	
Flexural			ASTM D790
Modulus	850,000	psi	
Strength	25,000	psi	
Impact (IZOD)			ASTM D256 / D4812
Unnotched	7.9	ft-lbf/in	
Notched	0.25	ft-lbf/in	
Heat Deflection Temperature (0.45 Mpa)	57	°C	ASTM D648
Vicat Softening (10.0N)	71.5	°C	ASTM D1525

MATERIAL SPECIFICATIONS
Standard Product Forms: 1.75 mm and 2.85 mm filament
Color is translucent off white
Intentionally formulated using environmentally safe materials
Typical printing conditions: Extruder 225 – 255 °C Build Plate 40-60 °C Chamber up to 30 °C

GENERAL INSTALLATION, USAGE, AND CARE OVERVIEW

Storage and Preparation: Store AquaSys GP in metallized foil packaging with desiccant. Reseal after use.
See SDS for material handling.

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