

# KZ-1870-WH

## Highly Accurate ABS Like Resin

Solid State  
355 nm Lasers

### Description:

Allied PhotoPolymers KZ-1870-WH is a tough ABS like, dimensionally stable resin for 355 nm Solid State Laser Systems. It is ideal for general purpose and dimensionally challenging builds. Superior humidity resistance and exceptional shrink characteristics are major differentiators.

### Applications:

Prototype Tooling  
Master Pattern  
Small feature connectors

RTV Patterns  
Concept Models

### Characteristics:

- ✓ Quality finishing
- ✓ Fast building
- ✓ Low viscosity
- ✓ Water resistant
- ✓ Superb green strength
- ✓ Excellent re-wetting
- ✓ Supports break clean
- ✓ White
- ✓ Excellent viscosity stability
- ✓ Superior dimensional stability over time
- ✓ Terrific thermal stability over time
- ✓ Passed ISO 10993 Bio-Compatibility / Toxicity Testing



Owned and  
Manufactured  
In USA

### PHYSICAL PROPERTIES

DESCRIPTION	UNITS	VALUE
Viscosity	Cps	500
Appearance	White / Ivory	na
Critical Exposure (Ec)	mj/cm <sup>2</sup>	10.4
Penetration Depth (Dp)	mils	5.8
Liquid Density	g/cm <sup>3</sup>	1.13



### MECHANICAL PROPERTIES

MEASUREMENT	ASTM METHOD	UNITS	VALUE
Tensile Strength	ASTM D638	MPa ksi	53 7.69
Tensile Modulus	ASTM D638	MPa ksi	2100 305
Elongation at Break	ASTM D638	%	5 to 9
Flexural Strength	ASTM D790	MPa ksi	64 9.3
Flexural Modulus	ASTM D790	MPa ksi	2000 290
Impact Strength Notched Izod	ASTM D256	J/m ft-Lb/in	24 0.45
Hardness	ASTM D2240	Shore D	80
Heat Deflection 264 psi	ASTM D648	°C °F	45 113
Heat Deflection 66 psi	ASTM D648	°C °F	50 122
Water Absorption	ASTM D570-98	% weight	0.25

