

W90B Water-Washable Resin Instruction

1. The Product Description

W90B is a real water-washable resin, odorless, low irritation, available in 6 colors: clear, white, dark gray, black, clear orange, and clear blue. Prints in translucent colors are more transparent after cleaning than regular resin prints, while gray, black, and white prints have a silky, reflective surface.

The products have passed the inspection and obtained ROHS and REACH certificates.

2. Material Properties Data

	METHOD	DATA
Viscosity (25℃)	ASTM:D4212-10	139mpa.s
Shore Hardness	ASTM:D2240-05	82D
Tensile Strength	ASTM: D638-14	35.66MPa
Flexural Strength	ASTM: D790-10	38.07MPa
Notched IZOD	ASTM:D256-10	16.5J/m
Elongation at Break	ASTM: D638-14	18%

3. Printing

Environment When Printing: Since W90B resin is a hydrophilic material, this product is not recommended for printing in environments with humidity higher than 60%.

Supports Parameters: When the printing time is long, it is best to use supports with the diameter of 0.8mm or more (Medium Supports) to prevent the supports from absorbing water and softening.

Printing Settings: Use the standard resin settings of the printer brand you successfully printed as the "Standard Settings" (25-30℃), otherwise, use the default standard resin settings of the printer (or slicer) as the "Standard Settings". Then follow the following method to set the settings of RESIONE resin according to the "Standard Settings".

	Standard Settings	W90BTransparent/White /Blue/gray/black	W90BOrange
Layer Height(mm)	50	50	50
Bottom Exposure Time(s)	A	1*A	1.2*A
Exposure Time(s)	B	0.7*B	1.1*B
Light-off Delay (s)	D	D	D
Bottom Lift Distance(mm)	E	E	E
Lifting Distance(mm)	F	F	F

Bottom Lift Speed (mm/min)	G	G	G
Lifting Speed (mm/min)	H	H	H
Retract Speed (mm/min)	I	I	I

Note:

a. When the room temperature during printing is lower than **24°C**, change the settings as follows every **5°C** below:

Bottom exposure time: (RESIONE settings) +15%

Normal exposure time: (RESIONE settings) +15%

Light-off Delay time: (RESIONE settings) +1s

*The calculation of the above printing parameters is based on the experimental results of the RESIONE laboratory and is for reference only

4. Cleaning and Post-curing

Cleaning: a. The prints should not be hung on the build plate for a long time, and need to be shoveled off in time, cleaning and post-curing, otherwise the prints will absorb water and become soft and deformed.

b. Put the print in a water container, shake it back and forth, and the cleaning time should not exceed 3 minutes

c. The cleaned waste water should not be directly discharged into the sewer, but should be placed in the sun to allow the waste liquid to dry and solidify naturally.

Post-curing: If you use a post-curing box with a power of 40W, our recommended post-curing time is about 5mins

(Adjust the post-curing time according to the power of the post-curing box, the greater the power, the shorter the time)



Attentions:

a. Too long post-curing time will make the resin prints easy to warping, hard and brittle.

b. The resin prints will be fragile after post-curing. It is not recommended to apply force to the prints immediately. Just need to wait for a while until the internal stress of the prints is completely released.

5. Storage of Prints

a. Add the needed resin liquid when printing. To avoid moisture absorption of resin, please filter

the remaining resin as soon as possible and pour it into a new light-proof container for sealing and preservation after printing.

c. The prints should not be placed in a humid environment for a long time, otherwise they will absorb water and soften. Use an airtight bag or waterproof paint to protect your prints effectively.

For more questions, please contact support@godsaid3d.com