SIRAYA Tech

Shake the bottle and mix the resin in the vat before start printing!

Fast - Navy Grey requires 20% exposure than other Fast

User Guide for Fast

For other resin user guides, please visit https://siraya.tech support section

Fast is an affordable fast curing and non-brittle general application resin ideal for model making like tabletop minis, and figurines.
It is not a tough or engineering resin but can be mixed with Blu/Tenacious for more impact resistant.

Fast - Navy Grey is the latest iteration of Fast resin. It preserves the non-brittleness and easy printing of Fast resin while increase resolution.
It has has a beautiful matte finish which when combined with its dark navy grey color, it really shows off small features on a design.
What makes it beatiful is also what makes it different to print than other Fast resin.
Fast - Navy Grey needs about 20% more exposure time than regular Fast
Fast - Navy Grey gets it superb color from lots pigments and thus it settles quicker that regular Fast
Fast - Navy Grey also has a special additive that gives it the matte finish. This makes it separate faster than regular Fast

To print Fast - Navy Grey well and minimize separate
1. Shake the resin well in the bottle. We recommend such approach
2. Print over 20C but not over 30C to reduce separation. This is because resin separate quicker at higher temperature.
3. For resins, already in the vat, it is best to do a quick stir before pouring back to bottle for shaking in step1
4. Some users add 10% Tenacious to further increase durability and reduce separation
5. Make sure the build plate is very clean before each print. Some user would wash in acetone to ensure removal of resin/pigments on the plate.

While the ideal printing condition for Fast is over 20C, we have printed as long as 15C as long as the bottom layers uses more exposure time
Fast is designed for MSLA printer in mind. It can work in DLP and laser SLA printer but you would need FEP film based vat
Best print with recommended support setting, see below

Exposure for Navy Grey, adding 20-25% more exposure time than Fast grey)

Print Setting Recommendation

Brand	Elegoo	Elegoo	Elegoo	Elegoo	Elegoo	Elegoo	Anycubic	Anycubic	Anycubic	Anycubic	Phrozen	Phrozen	Phrozen	Peopoly	Peopoly	Peopoly	Peopoly	EPAX	EPAX	EPAX	EPAX	EPAX	Creality	Creality	Creality	Creality
Printer	**Mars**	**Mars Pro**	**Mars 2**	**Mars 2 Pro**	**Mars 3**	**Saturn**	**Photon**	**Mono**	**Mono SE**	**Mono X**	**Sonic Mini 4K**	**Might 4K**	**Mega 8K**	**Phenom**	**Phenom Noir**	**Phenom L**	**Phenom Prime**	**X1**	**E6**	**E10**	**X10**	**X156**	**LD-002H**	**LD-002R**	**Halot One**	**Halot Sky**
Layer height (mm)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bottom layer count	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	5	6	5	5	5	5	5	5	5	5	5
Exposure time (s)	10	10	2.5	2.5	2.5	3	15	1.9	1.9	2.2	3	3.25	4	15	2.5	9.5	2.5	10	2.5	2.5	2.5	9.5	2.6	10	3	3
Bottom exposure time (s)	65	60	35	35	35	45	90	25	25	30	45	45	55	100	35	80	35	65	35	35	35	80	35	65	45	45
Waiting Mode During Printing	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest	Rest
Bottom light off delay (s)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest Time Before Lift (s)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest Time After Lift (s)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest Time After Retract (s)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bottom Lift Distance (mm)	5	5	5	5	5	7	5	5	5	7	5	7	10	12	12	15	12	5	5	7	7	15	5	5	5	5
Lift Distance (mm)	5	5	5	5	5	7	5	5	5	7	5	7	10	12	12	15	12	5	5	7	7	15	5	5	5	5
Bottom Retract Distance (mm)	5	5	5	5	5	7	5	5	5	7	5	7	10	12	12	15	12	5	5	7	7	15	5	5	5	5
Retract Distance (mm)	5	5	5	5	5	7	5	5	5	7	5	7	10	12	12	15	12	5	5	7	7	15	5	5	5	5
Bottom Lift Speed (mm/min)	50	50	50	50	50	45	50	50	50	45	50	45	45	32	32	32	32	50	50	45	45	45	50	50	50	45
Lift Speed (mm/min)	60	60	60	60	60	50	60	60	60	50	60	50	45	48	48	48	48	60	60	50	50	50	60	60	60	50
Bottom Retract Speed (mm/min)	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Retract Speed (mm/min)	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Transition Layer Count	4	4	5	5	5	6	4	5	5	6	5	6	6	6	6	6	6	4	5	6	6	6	5	4	5	5
Transition Type	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear
Transition Time Decrement	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Printer Profiles https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing

Recommend best support settings:

We recommend medium preset support setting in chitubox for smaller prints. Heavy support for large prints on large priners
If you don't use chitubox, at least download a copy and see the detail settings for each preset and copy them over to your software of choice

Cleaning:
Use a painter brush (or any brush made with hair) remove excess resins on the printed part with Use 95% concentrated Ethanol (preferred) or IPA to clean. Some form of methnol should work but make sure it does not contain acetone.
Do not submerge the parts in alcohol for more than 30 seconds. After 2-3 minutes of cleaning action, remove alcohol with a hair dryer or air blower. For complex part with lots cavities, it may be a good idea to clean/dry multiple times.
User can check by touching the dryed surface of the part to see if it is still sticky. If the dryed surface is still sticky, wash some more and dry again.

Post Curing:
Fast reached its optimal strength when the printed part is post-cured with UV after cleaned. Use 395-405nm UV light and cure for about 1-2 minutes.
Make sure resin is completely cleaned off and there is not alcohol left (it needs to be dry) on the print before curing.
It is important to dry the print made by Fast completely before post curing. There is no need to use submerge in water technique with Fast.

Mechanical Properties
Shore D 72
Tensile Strength 33Mpa
Young's Modulus 800Mpa
Elongation At Break: 6%
Viscosity: 100cps
Heat Deflection Temperature: 68C
MSDS
https://drive.google.com/open?id=1IWqnHnGQKKKNFQRnKoSpG3X_4cuvlxrP