

## **User Guide for Tenacious**

For Tenacious Flex Black, please visit https://docs.google.com/spreadsheets/d/1BRSK2unx4RggCYtEBk2l\_4NpeWn0LMvcd1C2JXg4XLw/edit?usp=sharing

Tenacious is developed to be a resin with excellent impact resistance. It can be flexible but also a lot of strength, especially when printed thick. While it does not have the same level of hardness/resolution as other resin, it still can capture decent amount of details. And it should not stink up user's work environment

Room temperature 20-28C

Due to higher polymer content for its outstanding mechanical properties, the ideal printing condition for Tenacious is over 25C.

If user can maintain a resin temperature of 30C, the printing time could be further reduced

# Please download profiles base for Elegoo, Anycubic, Phrozen, Peopoly, EPAX, Creality

https://drive.google.com/drive/folders/1eCz4\_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing

Resin Temperture 25-35C

#### Check out recommended support settings if you have print failures

#### **Exposure - Tenacious (Clear)**

Recommended

Mars 3

Printer	Layer Height	Exposure (s)	# of Initial Layers	Exposure for Init Layers	Exposure (s)	# of Initial Layers	Exposure for Init Layers	Note				
Photon	50um	15 (s)	4	60 s	15 (s)	6	80 s					
EPA X1	50um	12 (s)	4	60 s	12 (s)	6	60 s					
EPA X1	100um											
Shuffle	50um											
Shuffle XL	50um											
D7	50um											
Inkspire	50um				15 (s)	6	80 s	Inkspire does no	ot specify its light	output, one user to	old us it is very clo	sely to Photon
Photon Mono	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Photon Mono X	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Mars 2 Pro	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Mars 3	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Saturn	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Sonic Mini 4K	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Might 4K	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Mega 8K	Where to find printer pro	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-ifBLp4L9mKYebY90lfHHO?usp=sharing										
Peopoly Printers	Where to find printer pro	ofiles: https://drive	.google.com/drive/	folders/1eCz4_dc0fT-jfBLp	4L9mKYebY90lfl	HO?usp=sharing						

### Exposure - Tenacious (Obsidian Black)

Recommended		Resin Temperture 25-35C			Room temperature 20-28C							
Printer	Layer Height	Exposure (s)	# of Initial Layers	Exposure for Init Layers	Exposure (s)	# of Initial Layers	Exposure for Init Layers	Note				
Photon	50um	12 (s)	4	40 s	12 (s)	4	40 s					
EPA X1	50um	9 (s)	4	40 s	9 (s)	4	40 s					
EPA X1	100um											
Shuffle	50um											
Shuffle XL	50um											
D7	50um											
Inkspire	50um				15 (s)	6	80 s	Inkspire does not specify its light output, one user told us it is very closely to Pho				
Photon Mono	Where to find printer p	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Photon Mono X	Where to find printer p	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Mars 2 Pro	Where to find printer p	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-ifRl n4I 9mKYehY90lfHHO2usn=sharing										

Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4\_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing

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Saturn	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dcofT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Sonic Mini 4K	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Might 4K	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Mega 8K	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Peopoly Printers	Where to find printer profiles: https://drive.google.com/drive/folders/1eCz4_dc0fT-jfBLp4L9mKYebY90lfHHO?usp=sharing										
Before Printing											
It is a good practice to mix resin ar	nd expose the bottom of the	vat to air before print	ting. This replenish oxyge	en in the vat and helps r	educe peel force.						
It would also ensure print consiste	ncy if user can get the initia	I resin temperature at	oove 25 and keep the en	vironmental temperature	above 20 C						
Recommend best support settings	:										
Tenacious has the most impact res	sistance of all the Siraya Te	ch resins and thus ha	s the most flexibility. This	s means it likes thicker s	upport to print well.						
Depending on the printer, you may	•		•			sin.					
Tenacious Support recommendation	on: Tenacious has the more	flexibility of all our re-	sins Make sure the supp	oort tip diameter is 1.2mi	m for larger prints with a	depth of 0.5mm. See more	full settings recommend	led			
https://www.facebook.com/groups/		•			J. 1. 3. 1.						
Cleaning:											
Use a painter brush (or any brush	made with hair) remove ex	cess resins on the prin	nted nart with Use 95% o	concentrated Ethanol (nr	eferred) or IPA to clean S	Some form of methnol sho	ıld work hut make sure it	does not contain acetone			
Do not submerge the parts in alcol	,		•		,						
User can check by touching the dr						ipiex part with lots cavities,	it may be a good idea to	oleaniary manapie ames.			
Oser can check by touching the di	led surface of the part to so	e ii it is still sticky. Ii t	ric dried surface is still s	dicky, wash some more a	and dry again.						
Post Curing:											
Tenacious reached its optimal stre	nath when the printed part	is post sured with LIV	ofter elegand Line 20E	40Epm LIV/ light and our	o for about 25 minutes						
		•									
Make sure resin is completely clea	aned oir and there is not aid	onor left on the print b	elore curing. Curing by s	submerging object in wa	ler will significantly increa	ise curing eniciency					
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Mechanical Properties	.,										
Shore Hardness (D											
Tensile Stress at Break (MPa											
IZOD Impact (Notched, J/m											
	55										
HDT at 0.455 MPa (°C											
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Elongation at Break (%	5) 70										
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Elongation at Break (% Young's Modulus (MPa	5) 70 a) 800	mWI3Pt3mZ0JoZ									