



## Material Specification Print Sheet

### Taulmann 618 Nylon

Nylon

Taulmann



### Pre and Post Processing:

Nylon must be kept dry, see below. Sticks best to a garolite bed, but also fairly well to a heated bed with a slight amount of applied glue stick.

Nylon can be colored (pre or post printing) with various Nylon specific dyes.

### HAZARDS (rating 1-10)

Nylon releases minimal fumes, although it is still advised to work in a ventilated space.



## Material Specification Print Sheet

<p style="text-align: center;"><b>Settings to print with</b></p> <p>Temp Range: 230-250°C</p> <p>Recommended flow multiplier: 1.100</p> <p>Recommended layer size: 0.2</p> <p>Build Plate Temp: Print on Garolite</p> <p>Recommended Fan: 100%</p>	<p style="text-align: center;"><b>Prime/Unprime:</b></p> <table border="1" style="width: 100%;"> <tr> <td>Steps: 100</td> <td>Steps: 100</td> </tr> <tr> <td>Rate: 10,000</td> <td>Rate: 10,000</td> </tr> <tr> <td>Time (ms): 25</td> <td>Time (ms): 20</td> </tr> <tr> <td>Primes after Tool Change: 1</td> <td>Primes after Tool Change: 1</td> </tr> </table>	Steps: 100	Steps: 100	Rate: 10,000	Rate: 10,000	Time (ms): 25	Time (ms): 20	Primes after Tool Change: 1	Primes after Tool Change: 1
Steps: 100	Steps: 100								
Rate: 10,000	Rate: 10,000								
Time (ms): 25	Time (ms): 20								
Primes after Tool Change: 1	Primes after Tool Change: 1								
<p style="text-align: center;"><b>How well it handles prints</b></p> <p>Overhangs: 30°</p> <p>Retraction: 3</p> <p>Circles: 5</p> <p>Layer change: 5</p> <p>Fine detail: 4</p> <p>Curling: 3</p>	<p style="text-align: center;"><b>Properties of Material</b></p> <p>Modulus of Elasticity:</p> <p>Yield Strength:</p> <p>Fracture Point:</p> <p>Modulus of Elasticity in Bending:</p> <p><i>All parts done with a ___% infill</i></p>								

Chemical	Water	Vinegar	HCl	Acetone	HF	Sulfuric Acid
Resistance (High/Limited/None)						
Chemical	Aqua Regia	Bleach	Gasoline	Methyl Alcohol	Ethyl Alcohol	NaOH
Resistance (High/Limited/None)						

Images (Left to right, top to bottom): Single walled vase, Artifact/Feature size test, Retraction/Feature size test, arch, top of overhang test, bottom of overhang test.

Overhang: Minimum angle to the horizontal at which layers are relatively unperturbed.

Print handling parameters: 5-optimal, 4-very good, 3-fair, 2-passable, 1-very poor

Chemical Resistance: High-no observable affect after a long period of time, Limited-Slight affects over time (swelling, discoloration, slight softening, etc), None-very severely affected by chemical.



## Material Specification Print Sheet

### NOTES:

-Even more than with PVA, Nylon must be kept dry, as it can absorb nearly 18% of its mass in water within 24 hours in a humid area.



-The above images are of a vase printed with wet nylon. The print is much more stringy than the dry nylon (page 1), and the surface finish is also much more broken.

-To dry the nylon after it has been exposed to humidity, place it in an oven or kiln at 185°F (85°C) for 6 to 7 hours. Then be sure to place back in a dry environment after use.

-When printed correctly, Nylon is very strong and durable. It is possible to tap it without the material delaminating, and this can also be used as a mold for injection molding, assuming that it is made waterproof.