

## SECTION 1 - IDENTIFICATION

**COMPANY ADDRESS:**  
 The Virtual Foundry, Inc  
 1471 US HWY 51  
 Stoughton, WI 53589  
 USA

**PRODUCT NAME:** Aluminum 6061 Filamet™

## SECTION 2 - TYPICAL MATERIAL PROPERTIES

| Physical Properties | Unit | Value       |
|---------------------|------|-------------|
| Density             | g/cc | 1.50- 1.54  |
| Metal Content       | %    | 65.0 - 68.5 |

## SECTION 3 - FILAMENT SPECIFICATIONS

| Nominal Diameter | Diameter Tolerance | Ovality | Net Filament Weight |
|------------------|--------------------|---------|---------------------|
| 1.75mm           | ± 0.05mm           | ≥ 95%   | 500 / 250 grams     |
| 2.85mm           | ± 0.05mm           | ≥ 95%   | 500 / 250 grams     |
| Pellets          | -                  | -       | 1000 grams          |

## SECTION 4 - GUIDELINES FOR PRINTING

|                                        |                                                                                                                                                                 |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advised Printing Temperature</b>    | 190 - 230°C (374 - 446°F)<br>For high speed printers: 235 - 250°C (455 - 482°F)                                                                                 |
| <b>Advised Build Plate Temperature</b> | 40 - 65°C (104 - 149°F) (Optional)<br>65°C (149°F) is recommended for glass/G10 build plates                                                                    |
| <b>Build Plate Surface Type</b>        | Powder coated spring steel, glass, G10, blue painter's tape                                                                                                     |
| <b>Build Plate Preparation</b>         | Powder Coated Spring Steel: No preparation required<br>Glass/G10: Clean with IPA, print at 65°C (149°F)<br>PEI/PC/Fiberglass/Acrylic/Other: Blue painter's tape |
| <b>Print Cooling</b>                   | Recommended for small details/intricate parts                                                                                                                   |
| <b>Advised Printing Speed</b>          | 60 - 80mm/sec<br>For high speed printers: 120 - 130mm/sec                                                                                                       |
| <b>Advised Flow Rate</b>               | 120 - 135%                                                                                                                                                      |
| <b>Nozzle Size/Type</b>                | 0.6mm Hardened Steel                                                                                                                                            |

