

# Technical Data Sheet

## BFI3D Premium ASA Filament

| Identification |                                |
|----------------|--------------------------------|
| Trade name     | ASA 275                        |
| Chemical name  | Acrylonitrile styrene acrylate |
| Use            | Additive Manufacturing         |

| Filament Specification |                       |
|------------------------|-----------------------|
| Diameter:              | 1.75 & 2.85 ± 0.05 mm |

| Material properties                      |                        |            |
|------------------------------------------|------------------------|------------|
| Melt Flow Rate <sup>1</sup>              | 5 g/10 min             | ASTM D1238 |
| Melt temperature                         | 200-230°C              | -          |
| Density                                  | 1.08 g/cm <sup>3</sup> | ASTM D793  |
| Vicat softening temperature              | 94°C                   | ASTM D1525 |
| Heat deflection temperature              | 86°C                   | ASTM D648  |
| Tensile Strength at Yield <sup>2</sup>   | 42 Mpa                 | ASTM D638  |
| Tensile Elongation at Break <sup>3</sup> | 35%, (Min)             | ASTM D638  |
| Tensile Modulus <sup>4</sup>             | 1800 MPa               | ASTM D638  |
| Flammability 1.5mm / 3.0mm               | HB                     | UL 94      |

<sup>1</sup>Test conditions: T = 220°C; m = 10.0 kg

<sup>2,3,4</sup> Test conditions: 23°C, 50mm/min, 3.2mm

| Guideline for print settings* |                  |
|-------------------------------|------------------|
| Nozzle temperature            | 200-240°C        |
| Bed temperature               | 40-60°C          |
| Active cooling fan            | YES (up to 100%) |
| Layer height**                | 0.05 - 0.30 mm   |
| Shell thickness**             | 0.40 – 2.4 mm    |
| Print speed**                 | 40 – 200 mm/s    |

\*Settings are based on a 0,4 mm nozzle.

\*\* The range depends on the geometrical complexity