

RESIN - 3DS - Figure 4 PRO-BLK 10

Brand: 3D Systems

Product Code: 3DPR-PRO-BLK10



* Application example



* Application example

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Versatile Rigid Heat-Resistant Material Combines Speed, Strength, Excellent Mechanical Properties for Tool-Less, Direct Production of Plastic Parts

Figure 4® PRO-BLK 10 delivers on the promise of additive manufacturing with true direct digital production of plastic parts. Go from CAD to manufacturing line in one day with tool-less, same day part production.

With a fast print speed and simplified post-processing that includes a single curing cycle and single solvent cleaning, this material delivers exceptional throughput.

It is a high precision resin producing parts with a smooth surface finish and sidewall quality, and has excellent mechanical properties and long-term environmental stability that brings a new level of assurance to 3D production.

Isotropic properties:

Figure 4 technology prints parts that are isotropic in mechanical properties meaning the parts printed along either the XYZ axis will give similar results. Parts do not need to be oriented to get the highest mechanical properties, improving the degree of freedom for part orientation for mechanical properties.

Applications:

- * Tool-less, same day production
- * Direct production of small black plastic parts; examples include: motor housings, connectors, snap-fits, automotive interior and other general-use parts
- * Digital production to replace injection molding or soft tooling processes

Benefits:

- * Improved environmental stability of mechanical and performance properties over time

- * Fast throughput for part-in-hand with no secondary thermal cure required
- * Simple, single solvent cleaning
- * Excellent surface quality and repeatability
- * Accurate, low distortion material for fast first article print success

Features:

- * Fast print speed up to 62 mm/hr at 50 micron layer thickness
- * 70 °C heat deflection temperature, 12% elongation at break
- * Durability and strength
- * UL94 HB flammability
- * Biocompatible capable per ISO10993-5 and ISO10993-10
- * Exhibits thermoplastic behavior in necking at tensile break point

Attachments

Figure 4@ PRO-BLK 10 Comprehensive Data sheet