prototypeprojects

3D MADE, SIMPLE.®

PROTOTYPE PROJECTS MATERIAL GUIDE **Digital Light Projection**

PRO-BLK 10

Production-grade additive manufacturing material with gamechanging thermoplastic-like mechanical properties and long-term environmental stability

Versatile rigid heat resistant material combines speed, strength, excellent mechanical properties for tool-less direct production of plastic parts

DLP 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.



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 moulding or • soft tooling processes

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

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

Liquid Material

LIQUID PROPERTIES			
MEASUREMENT	CONDITION	METRIC	U.S.
Viscocity	@ 25 °C (77 °F)	293 cps	709 lb/ft-hr
Colour		Black	
Liquid Density	@ 25 °C (77 °F)	1.07 g/cm ³	0.039 lb/in ³
Layer Thickness (Standard Mode)		0.05 mm	0.002 in