

# DuraForm® PP 100 Plastic



*Automotive recliner seat cover made from the tough and rugged DuraForm® PP 100 Plastic.*

## Applications

- Prototypes where toughness and durability are essential
- Advanced prototypes where actual polypropylene properties are required
- Direct or bridge manufacturing where molded polypropylene properties are desirable

## Features

- Polypropylene material
- Tough and rugged
- Excellent chemical resistance
- Good fatigue life and impact resistance
- Optimized for Pro Manufacturing Centers

## Benefits

- Test in realistic and challenging environments
- Properties comparable to molded polypropylene
- Properties are consistent and repeatable
- Create living hinges and self-tapping bosses
- Good feature resolution, detail and surface finish
- Build parts up to 900 mm long



*Automotive vent grill.*



*DuraForm® PP100 Plastic can be used for self-tapping screws.*

# DuraForm® PP 100 Plastic

For use with all Sinterstation® Pro and Sinterstation® HiQ™ series SLS® Systems



*DuraForm® PP100 Plastic is strong, flexible and soft to the touch.*

DuraForm® PP 100 Plastic is available in parts from the online Parts Marketplace:  
[quote.3dsystems.com](http://quote.3dsystems.com)

DuraForm® PP 100 Plastic is also available via the following Preferred Parts Service Providers:

**Acu-Cast Technologies**  
[www.acucast.com](http://www.acucast.com)

**AdvaTech Mfg.**  
[www.advatechmfg.com](http://www.advatechmfg.com)

**American Precision Prototyping**  
[www.approto.com](http://www.approto.com)

**FineLine Prototyping**  
[www.finelineprototyping.com](http://www.finelineprototyping.com)

**Harvest Technologies**  
[www.harvest-tech.com](http://www.harvest-tech.com)

**Scicon Technologies**  
[www.scicontech.com](http://www.scicontech.com)



## Technical Data

### General Properties

Measurement	Condition	Metric	U.S.
Density (Sintered Part)	ASTM D792	0.82 - 0.86 g/cm <sup>3</sup>	0.82 - 0.86 g/cm <sup>3</sup>
Bulk Density (Powder)	ASTM D792	0.46 - 0.47 g/cm <sup>3</sup>	0.46 - 0.47 g/cm <sup>3</sup>
Tap Density (Powder)	ASTM D792	0.53 - 0.54 g/cm <sup>3</sup>	0.53 - 0.54 g/cm <sup>3</sup>

### Mechanical Properties

Measurement	Condition	Metric	U.S.
Tensile Strength, Ultimate	ASTM D638	20-22 MPa	3.0 - 3.2 ksi
Tensile Strength, Yield	ASTM D638	19-21 MPa	2.8 - 3.1 ksi
Tensile Modulus	ASTM D638	980-1350 MPa	142 - 196 ksi
Elongation at Break	ASTM D638	20-75 %*	20-75 %
Flexural Strength	ASTM D790	30 - 33 MPa	4.4 - 4.8 ksi
Flexural Modulus	ASTM D790	900 - 1150 MPa	130 - 167 ksi
Hardness, Shore D	ASTM D2240	65-68	65-68

\* Properties from parts built using 100% virgin powder



3D Systems Corporation  
333 Three D Systems Circle  
Rock Hill, SC 29730 U.S.A.

Tel: +1 803.326.4080  
Toll-free: 800.889.2964  
Fax: +1 803.324.8810

[moreinfo@3dsystems.com](mailto:moreinfo@3dsystems.com)  
[www.3dsystems.com](http://www.3dsystems.com)  
NASDAQ: TDSC

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