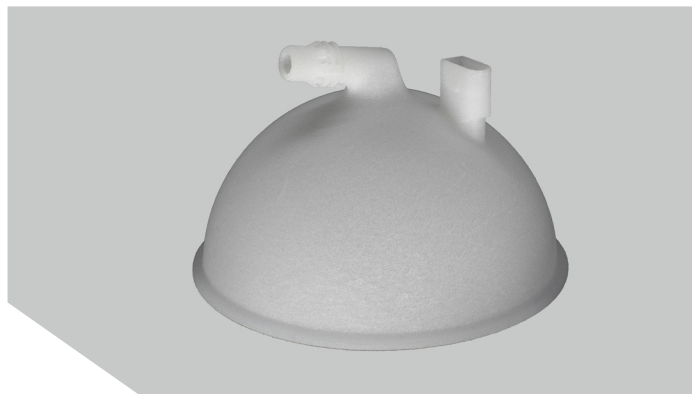


SELECTIVE LASER SINTERING

PAX SMOOTH NATURAL

[Supplier Data Sheet: DuraForm PAX Natural](#)

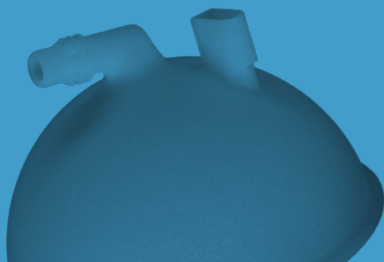


PRODUCT DESCRIPTION

PAX Smooth Natural is a versatile polyamide which is characterized by excellent toughness and flexibility in any direction, including the z plane. The material possesses great long term stability and durability and can be used to produce both prototyping as well as end-use parts.

APPLICATIONS

The material is very versatile, so applications range from living hinges and snap fits to fixtures, enclosures as well as orthotics.



KEY PRODUCT BENEFITS

- Excellent toughness and durability
- High impact and high elongation
- Long-term stability

PROPERTIES

PROPERTY	TEST METHOD	VALUE
Colour	-	Natural White
Sintered Density*	ASTM D792	1,03 ± 0,02 g/cm ³
Surface Roughness**	DIN EN ISO 4287	Ra = 10-30 µm; Rz = 60-140 µm
E-Module (x-y-z plane)	DIN EN ISO 527, test speed 50mm/min	1300 ± 200 MPa
Tensile strength (x-y-z plane)		40 ± 5 MPa
Elongation at break (x-y plane)		>60%
Elongation at break (z plane)		>20%
Elongation at yield (x-y-z plane)		5 ± 2%
Heat deflection temperature @ 0,46 MPa*	ASTM D648 Test Method A	105 ± 5 °C
Heat deflection temperature @ 1,82 MPa*		42 ± 2 °C
UL Flammability*	UL94	HB

*From supplier data sheet

**Surface roughness may vary depending on orientation

TOLERANCES

For well-designed parts, tolerances of ± 0.30mm plus 0.002mm/mm can typically be achieved. Note that tolerances may change depending on part geometry, and mentioned values can only be achieved with parts smaller than 200mm.