

Material data sheet

voxeljet 3D printers

Plastic

Base material	PMMA particle material (55 µm)	PMMA particle material (85 µm)
Binder-type	Polypor B	Polypor C
Tensile strength	≥ 2.0 MPa	≥ 2.0 MPa
Yield point	1 %	1 %
Burn-out temperature	700 °C	600 °C
Residual ash content	< 0.01 weight %	< 0.01 weight %
Especially suited for	investment casting; design models	investment casting
Advantages	sharp edges; for highest accuracy and true-to-detail; reusable particle material	white colour; good for dyeing; burns out very well; reusable particle material

Technical data plastic parts

Layer thickness	150 - 200 µm; Standard 150 µm
Resolution x, y	up to 600 dpi
Accuracy	± 0.4 % (min. ± 0.3 mm)

› Can be used for prototypes, illustrative models or lost models

› Precise layering & high accuracy

› Components of high complexity

Suitable finishing treatment

	Wax	Epoxy
Tensile strength	see base material	up to 25 MPa
Softening temp.	73 °C	80 °C
Burn out temp.	see base material	-
Characteristics	smooth liquid, resistant surface	solid material, dyeable

› Economical production in batch sizes of one as well as in series production

› Infiltration in any colour

› Perfect for investment casting because of the base material PMMA

Sand

Base material	any standard raw silica sand
Binder-type	Phenolic binder
Bending strength	250 - 500 N/cm ²
Loss on ignition	adjustable (2.0 - 2.6 weight %)
Especially suited for	sand casting
Advantages	low emissions

› No sand pre-treatment needed

› No activator & mixer required

› Very easy to finish (dry process)

› Sand almost 100 % recyclable

› Castable with all current alloys

Technical data sand parts

Layer thickness	250 - 300 µm; standard 300 µm
Resolution x, y	up to 300 dpi
Accuracy	± 0.1 % (min. ± 1.5 layer thickness)

› Very good bending strength

› Adjustable binder content & IR lamp

› Non-toxic binder

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