

Precimid® 1170

Precimid® 1170 is a proven ultramicro powder with high-performance application for laser sintering system. Laser sintering part can be used as functional model, vacuum casting prototype, and even final plastic part/product. According to different purposes, users can select different laser energy and in the most economical way to apply this material to plastic model and direct part.

Key Performance:

- | Low temperature impact resistance
- | Ultra-low water absorption
- | High deflection
- | Forming efficiency
- | Heat and corrosion resistance
- | Precise tolerance and almost non deformation

Applicable Systems:

- | DTM
 - SINTERSTATION 2000
 - SINTERSTATION 2500
 - SINTERSTATION 2500PLUS
- | 3DSYSTEMS
 - VANGUARD SERIES
- | EOS GmbH
 - EOSINT P350
 - EOSINT P360
 - EOSINT P380
 - EOSINT P700
- | TPM ELITE
 - P 3500
 - P 5000

Part Applications

- I Plastic direct parts for automobile and motorcycle
- I Gas collection tubes or air headers of different type
- I Household/electrical appliance and toys
- I Air and electric tools
- I Underwater tools
- I Sports equipment
- I Medical equipment

Precimid[®]1170 Property Sheet

	Test method	Unit	State	Precimid [®]	
				1170	
General properties					
Density		Kg/dm ³	Dry	0.94	
Water absorption	(23°C/sat.)	DIN 53495	%	1.5	
Moisture absorption	(23°C/50% r.h.)	Acc. DIN 53495	%	0.7	
Mechanical properties					
Tensile strength	ISO527	MPa	Cond.	40	
Elongation at break	ISO527	%	Cond.	18	
Tensile E modulus	ISO 527	MPa	Cond.	1100	
Impact strength	Izod, 23°C	ISO 180/1C	MPa	Cond.	N.B.
	Izod, -30°C	ISO 180/1C	MPa	Cond.	N.B.
Notched impact strength	Izod, 23°C	ISO 180/1A	J/m	Cond.	8
	Izod, -30°C	ISO 180/1A	J/m	Cond.	4
Thermal properties					
Heat distortion temperature					
HDT B 0.46 N/mm ²	DSC	DIN 53461	°C	Dry	110
HDT A 1.82 N/mm ²	DSC	DIN 53461	°C	Dry	62

- I Parameters of sintering energy may vary according to different laser sintering system;
- I Parameters of sintering energy may also vary according to different usage;