



- Durability and strength
- Low-cost material
- Non-marring and abrasion resistant
- Excellent chemical resistance
- Very low moisture absorption
- Very good elongation properties at extreme temperatures
- Eliminates random outliers in mechanical properties that are found in SLS printing
- Similar processing to PA 11 SLS
- 60% less carbon footprint impact than PA 12
- Low warp materials

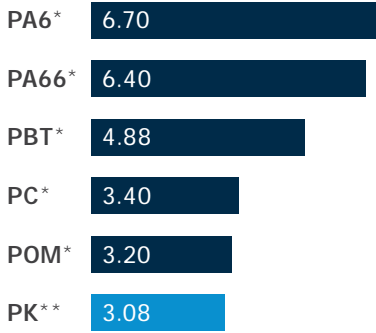


For additional information, visit

MATERIAL	UTS (MPA)	MODULUS (MPA)	EAB (%) S	UNNOTCHED IMPACT STRENGTH (J/M)	NOTCHED IMPACT STRENGTH (J/M)		ELONGATION AT YIELD, OFFSET 0.2% (%)	TENSILE STRESS AT YIELD, OFFSET 0.2% (MPa)
	Orientation	Orientation	Orientation	Orientation	Orientation		(%)	(MPa)

For additional information, visit

In addition to good mechanical properties, PK5000 powder for SLS printing has great resistance to a variety of chemicals for demanding applications. Printed PK5000 has a low polarity surface, which coupled with its high crystallinity and close packing in the crystalline phase prove to handle many harsh chemicals.



Acrylate Free

Melamine Free

Bisphenol A Free

Formaldehyde Free

Lead/Chrome Free

Phthalate Free

**EARTH  
FRIENDLY**

\* Other ETP data is based upon the Eco Profiles data from [www.plasticseurope.org](http://www.plasticseurope.org)

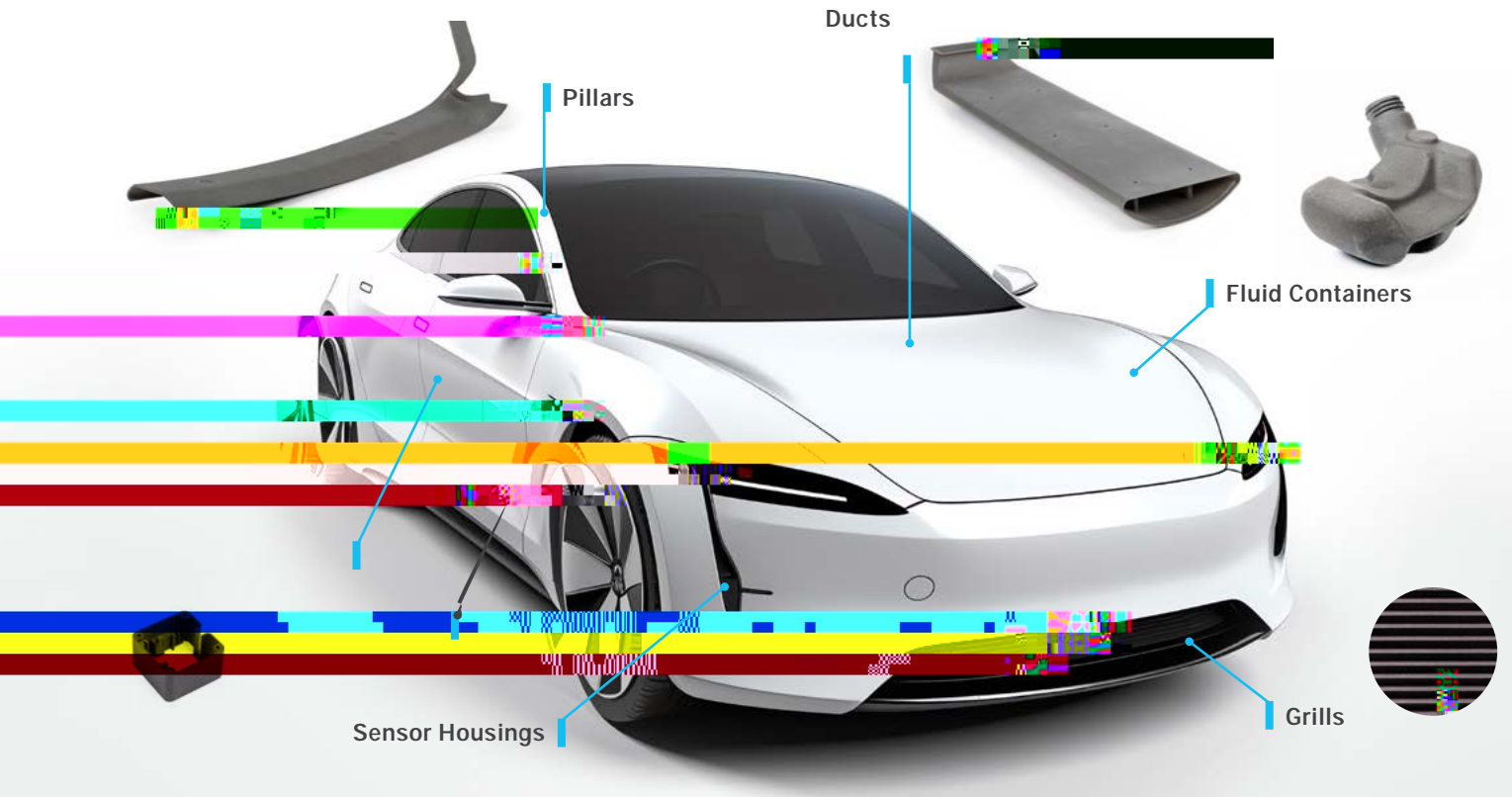
\*\* PK data is based upon Ecoinvent database according to ISO Standard 4040 and 14044

For additional information, visit

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# Automotive

PK 5000 shines in the automotive industry by printing durable and complex geometries without additional costs, making it ideal for manufacturing lightweight, integrated components that can



Prototypes  
 Molding Equivalent  
 Prototypes  
 Bridge Production  
 Serial Production Parts

Underhood  
 Paneling  
 Surface Appearance/  
 Aesthetic Parts  
 Paintable Parts

- Cost competitive for bridge and serial production
- Molding Equivalent Prototypes for low volume, bridge production
- Higher print success rate for larger components
- Durability
- Easy post-processing to get a better cosmetic for customer facing parts

For additional information, visit

# Drone/UAV

PK 5000's mechanical properties prevent degradation from harsh chemicals and extreme temperatures and are able to handle maximum damage tolerances.



- Fuel Tanks
- Landing Gear
- Damage Tolerance Skins
- Pressure Vessels
- Fluid Vessels
- Panels



- 3D printed fuel tanks allow for design that increases fuel capacity and flight time
- PK 5000 is (chemical) resistant to (fuel mixture) and provides UV stability
- Rigidity and impact resistance for end use and ease of assembly
- Less overall weight from additive manufacturing improves performance
- "Higher" damage tolerance in multiple applications vs materials that meet heat and chemical requirements

For additional information, visit





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# Agriculture and Heavy Machinery

PK5000 works in conjunction with additive manufacturing in the agriculture space to allow printed parts that maintain strength and durability needs.



Low to Medium  
Volume Production  
Prototypes  
Molding Equivalent  
Prototypes  
Bridge Production  
Serial Production Parts

Chemical and High Wear  
Parts  
Grain Handling Hoppers  
Fluid Handling Components  
Air seeder  
MRO Parts  
Sensor Mounts  
Brackets  
Surface Panels

- Cost
- Higher print success rate for larger components
- Durability
- Molding equivalent prototyping for low volume, bridge production
- Chemical resistance
- Eliminates brittle print failures
- Part replacement for those impossible to solve situations and applications

For additional information, visit

# Military Vehicles

PK 5000 excels in prototype and end-use parts where printed parts need to act like molded parts and where annual volumes make tooling cost prohibitive. Large part sizes enable panels and pieces not possible with other technologies.

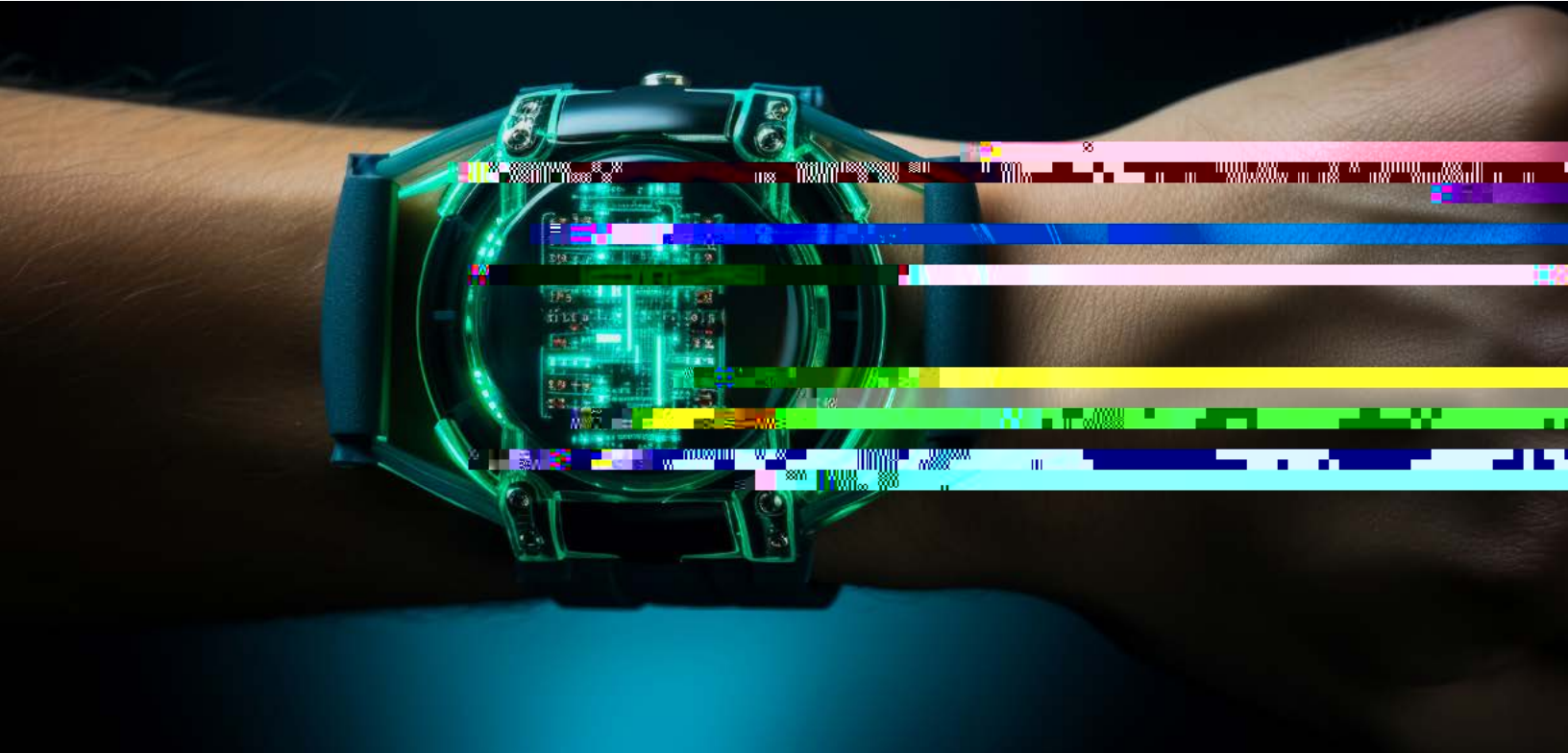


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# Wearables

PK 5000 excels in wearable devices where toughness is critical. PK combines a skin safe material with a nearly indestructible thermoplastic.



Prototypes  
 Molding Equivalent  
 Prototypes  
 Bridge Production  
 Serial Production Parts

Biometric/health monitoring products  
 Custody safety monitors  
 Fitness Tracking  
 Wrist/Ankle-Wear  
 Virtual Reality Headwear  
 Smart Watches

For additional information, visit

# Fluid Handling Products



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For additional information, visit

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## Custom Sample Request

See how your 3D part looks, feels and performs when printed with our PK 5000.



To set up a meeting with us, visit

For additional information, visit

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