

HP 3D Filament VICTREX™ AM™ 200

HP Industrial Filament (IF) 3D Printer 600 High Temperature (HT) Solution



Material overview

HP 3D Filament VICTREX™ AM™ 200 is a semi-crystalline PolyArylEtherKetone (PAEK) thermoplastic filament for additive manufacture by filament fusion and melt extrusion 3D printing processes.

Compared to standard injection molding and extrusion grades of PEEK, this material offers improved interlayer adhesion, reduced shrinkage and warping, and improved resistance to bed delamination. These properties make it suited for applications requiring higher printed part strength and printability than standard PEEK grades.

Typical use cases

Suited for:

- Functional parts in higher temperature environments where standard PEEK grades present printability challenges
- Chemically aggressive industrial environments
- Aerospace, automotive, and defence structural and functional components
- Sterilisable components for medical devices (non-implant)
- Parts requiring low outgassing

Regulatory¹

Certification / Approval	Scope
UL94-V0	Inherent flame retardancy of the raw material

Approvals referenced apply to the raw material. Customers are responsible for verifying finished printed parts against applicable requirements.

Material properties¹

	Conditions	Typical value	Typical value		
			XY	YZ	ZX
Tensile strength	Yield, 23 °C	ISO 527	65 MPa	70 MPa	45 MPa
Tensile modulus	23 °C	ISO 527	3.3 GPa	2.5 GPa	2.7 GPa
Tensile elongation	Break, 23 °C	ISO 527	15 %	15 %	5 %

Thermal properties¹

	Conditions	Testing method	Typical value
Melting point	DSC	ISO 11357	303 °C
Glass transition (T _g)	DSC (onset)	ISO 11357	151 °C
	DSC (midpoint)	ISO 11357	154 °C
Crystallisation point	DSC	ISO 11357	249 °C
Thermal onset degradation point	TGA	ISO 11357	549 °C

Flow properties¹

	Conditions	Testing method	Typical value
Melt viscosity	360 °C, 1000s-1	ISO 11443	350 Pa.s
	360 °C, 1000s-1	ISO 11443	600 Pa.s
	400 °C, 1000s-1	ISO 11443	250 Pa.s
	400 °C, 1000s-1	ISO 11443	400 Pa.s
Melt stability	1hr at 400 °C (1000s-1 test)	ISO 11443	1 % change

Example Processing Conditions¹

	Typical value
Extrusion temperature	380-420 °C (Nozzle)
Build-space temperature	120-155 °C (see note below)
Bed temperature	140-160 °C
Annealing conditions	Suggested starting point: 170°C, 2h hold, 3 °C/min ramp rate. Optimization may be required.
Dimensional change on annealing	8-9% expansion in Z, 3-5% shrinkage in XY (Typical)

Material specifications¹

Product name	Weight supply	Diameter filament
HP 3D Filament VICTREX™ AM™ 200 Natural color	1 kg	1.75 mm

Process compatibility¹

Support material compatibility	HP 3D Filament SM10 White, HP 3D Filament SM30 White
Compatible printer modules	HP IF 3D Printer 500 Module

Safety Data Sheet (SDS)*

A general Safety Data Sheet covering HP 3D printing materials is available here: hp3dfilaments.com/safetydatasheets

This document provides guidance on safe handling, storage, and disposal. For material-specific questions, please contact your HP AM representative.

1. Typical values provided by Filament Provider. These results have not been validated on the HP Industrial Filament (IF) 3D Printer 600 HT Solution. Values are indicative; actual results may vary depending on print profile and process conditions. Contact HP to develop customized print profiles optimized for your application.