

Biocompatibility testing and results of final printed parts with HP Agents and selected HP 3D Printing Materials

Test standards		Material: HP 3D HR PA 12 W	Material: HP 3D HR PA 12, enabled by Evonik	Material: HP 3D HR PA 11	Material: BASF Ultrasint® TPU	Material: ESTANE® 3D TPU M88A	Material: ESTANE® 3D TPU M95A	Material: HP 3D HR PP enabled by BASF
Cytotoxicity	(ISO 10993-5)	✓	✓	✓	✓	✓	✓	✓
Maximization sensitization	(ISO 10993-10)	✓	✓	✓	✓	✓	✓	✓
Irritation/ intracutaneous	(ISO 10993-10)	✓	✓	✓	✓	✓	✓	✓
Acute systemic toxicity	(ISO 10993-11)	✓	✓	✓	N/A*	N/A*	N/A*	✓
Muscle implantation	(UPS-88)	✓	✓	✓	N/A*	N/A*	N/A*	N/A*
Hemolysis	(ISO 10993-4)	N/A*	✓	N/A*	N/A*	N/A*	N/A*	N/A*
Genotoxicity	(ISO 10993-3)	✓	✓	N/A*	N/A*	N/A*	N/A*	N/A*

✓ Passed all screening tests.

✓ Passed 9/10 screening tests.

For further details, please refer to: [“The Summary of Regulatory Compliance and Environmental Attributes. HP 3D HR PA 12 W and HP 3D710W/3D710 fusing and detailing agents.”](#)

*Test HP has not conducted to date

It is the responsibility of each customer to determine that its use of HP Agents & 3D Materials are safe and technically suitable to the customer’s intended applications and consistent with the relevant regulatory requirements (including FDA requirements) applicable to the customer’s final product. Customers should conduct their own testing to ensure that this is the case. Results may vary if the testing is performed under different conditions than those existing at testing time and/or those required testing conditions that applied for the purposes of the biocompatibility tests referenced above. Because of possible changes in the relevant industry standards, FDA guidance, and other legal or regulatory requirements, as well as possible changes in HP Agents & 3D Materials, HP cannot guarantee that the status of HP Agents & 3D Materials will remain unchanged or that it will qualify and or comply with ISO 10993, US FDA’s guidance or USP Class I-VI Certification for any particular use.

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