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ABSTRACT: The use of biobased plastics is of great importance for many applications. Blending thermoplastic polylactide (PLA) with polyhydroxyalkanoate (PHA) enables the formulation of a more mechanically powerful material and this enables tailored biodegradation properties. In this study we demonstrate the 3D printing of a PLA/PHA blend as a potential candidate for biocompatible material applications. The filament for 3D printing consisted of PHA, which contains predominantly 3-hydroxybutyrate units and a small amount of 3-hydroxyvalerate units, as revealed by multistage mass spectrometry (ESI-MS^n). This research