Ultimaker

Ultimaker Breakaway
Technical data sheet

General overview

Chemical composition	PLA / TPU mixture - see Ultimaker Breakaway safety data sheet
Description	Ultimaker Breakaway is a support material for dual extrusion 3D printing. Breakaway supports can be quickly removed and do not need further post-processing to give a smooth finish to your 3D print. Designed for a hassle-free 3D printing experience, Breakaway provides good adhesion to PLA, PETG, Nylon and ABS-based filaments. For the latest compatibility overview, check our support website.
Key features	Good bonding to a variety of build materials, robust support while still weak and ductile enough to remove from the model. Longer shelf life and less moisture sensitivity compared to water-soluble support materials
Applications	Breakaway support material for a variety of Ultimaker materials. Check our support website for the latest overview.
Non-suitable for	Intricate, internal geometries where the support is not accessible for removal. Delicate objects with tiny details. Food contact and in vivo applications. Swelling or elution might occur against oils or organic solvent

Filament specifications

	Method (standard)	Value
Diameter	–	2.85 ± 0.05 mm
Max roundness deviation	–	0.10 mm
Net filament weight	–	750 g
Filament length	–	~ 96 m

Color information

Color	Color code
Breakaway White	RAL 9010

Thermal properties

	Test Method	Typical value
Melt mass-flow rate (MFR)	ISO 1133 (220 °C, 2.16 kg)	3-6 g / 10 min
Heat deflection (HDT) at 0.455 MPa*	ISO 75-2 / B	-
Vicat softening temperature*	ISO 306 / A120	-
Glass transition	ISO 11357 (DSC, 10 °C / min)	59.7 °C
Melting temperature	ISO 11357 (DSC, 10 °C / min)	151.8 °C

Other properties

Specific gravity	ASTM D792	1.22 g / cm^3

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