

Technical data sheet Breakaway

Ultimaker

Chemical name	Polyurethane and Polylactic acid blend
Description	Ultimaker Breakaway is a support material for multi-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 most of the Ultimaker material range, including ABS
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 Ultimaker ABS, Nylon, PLA, CPE and CPE+.
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 solvents

Filament Specifications

	<u>Value</u>	<u>Method</u>
Diameter	2.85±0.05mm	-
Max roundness deviation	-	-
Net filament weight	750 g	-
Filament length	~96 m	-

Colour information

	<u>Color</u>	<u>Color code</u>
	White	RAL 9010

<u>Thermal Properties</u>	<u>Value</u>	<u>Test method</u>
Melt mass-flow rate (MFR)	3-6 g/10 min	ISO 1133 (220°C, 2.16 kg)
Heat Deflection(HDT) at 0.455 MPa	-	-
Heat Deflection(HDT) at 1.82 MPa	-	-
Vicat softening temperature at 1N	145.5°C	ISO 306 (Method A, 120°C/h)
Glass transition	-	-
Coefficient of thermal expansion	-	-
Melting temperature	-	-
Thermal shrinkage	-	-

<u>Other properties</u>	<u>Value</u>	<u>Test method</u>
Specific gravity	1.22	ASTM D792
Flame classification	-	-

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