

# Technical data sheet Breakaway

Ultimaker

## Chemical composition

See Breakaway safety data sheet, section 3

## 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

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

## Color information

Color	Color code
Breakaway White	RAL 9010

## Thermal properties

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

## Other properties

	Value	Test method
Specific gravity	1.22	ASTM D792
Flame classification	-	-

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