

**3D**

# Print Materials



 **Verbatim**  
Technology you can trust

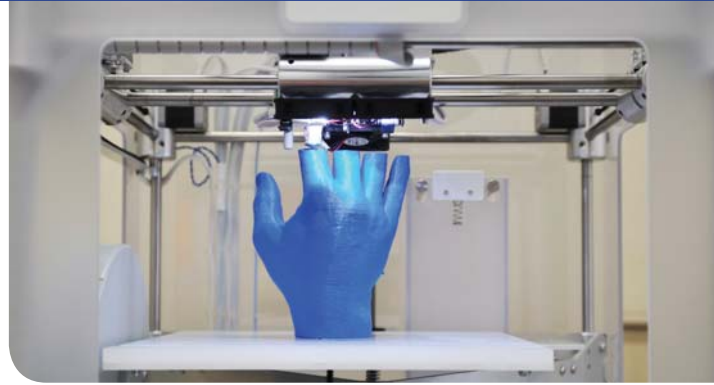
**THE KAITEKI COMPANY** Mitsubishi Chemical Holdings Group

## Verbatim 3D Filaments

As part of the Mitsubishi Chemical Holdings Group, one of the largest chemical companies in the world, Verbatim is entering the market of 3D plastic filaments, combining its extensive global sales and marketing operation with Mitsubishi Chemical's expertise in polymer products.

### The 3D Printing Revolution

The 3D printing process enables physical objects to be made from three-dimensional models by laying down successive layers of a material in an additive manufacturing process. The industry is currently undergoing a massive transformation and enjoying unprecedented growth with Gartner estimating that it will reach a value of 500 million euros in 2014.

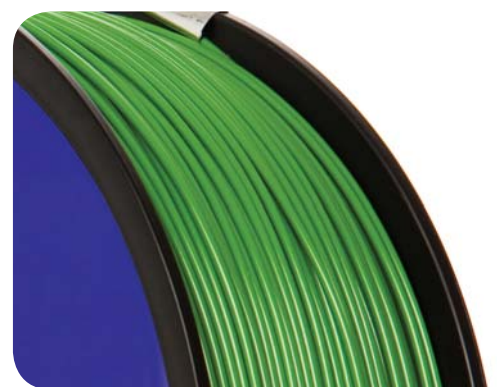


### Consumer Demand

Already, a wide range of industries have adopted the technology. Health care is already immersed in 3D printing with dental applications, personalised hip and knee replacements and parts for medical machinery all utilizing 3D printing extensively. The aerospace and automotive industries are also very active printing components using the technology, while the most rapid expansion of 3D printing is believed to come from the consumer market, with small business owners, schools, universities and serious hobbyists adopting it with great enthusiasm.

### Made in Japan

Verbatim's filaments are manufactured in Japan from the highest quality materials and produced to extremely tight tolerances to ensure consistent feed and stable printing. For a printed object to be strong and accurately formed it is crucial that the printer knows exactly how much plastic it is pulling through the machine at any given time. The precision of the filament diameter and the roundness of the filament - the closeness of tolerance - is a vital measurement in ensuring reliable printing. In buying from Verbatim, you will benefit from the highest levels of quality control, the hallmark of Japanese manufacturing.



### Australian and New Zealand Sales and Support

With our headquarters housed in Melbourne and a dynamic mobile sales force across Australia and New Zealand, Verbatim is positioned very well to serve Australian and New Zealand customers. We distribute our products from a state-of-the-art central warehouse in Melbourne, which has excellent road access ensuring fast and accurate deliveries. We also offer a free of charge support service to maintain and deliver our promise of guaranteed customer satisfaction.

## Unique Materials

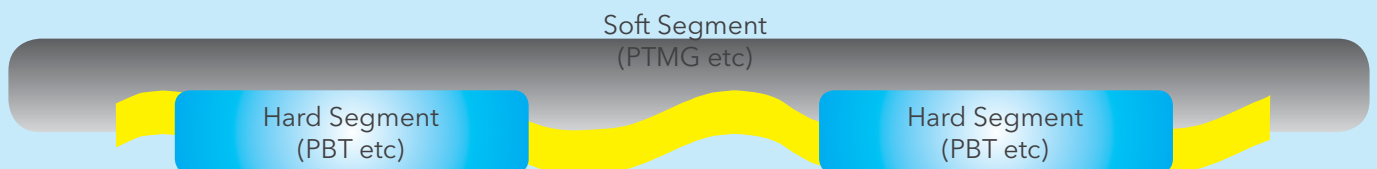
Verbatim will soon expand its portfolio to include exclusive filaments developed by Mitsubishi Chemical such as RABALON, THERMORUN, PRIMALLOY and ZELAS.

The first of these special filaments to be marketed and distributed by Verbatim is **PRIMALLOY™**. It produces objects with a rubberised feel which will have possible usage for things like hand grips for tools, earphones, goggles, mobile phone cases, automotive parts, and many more.

It is a thermoplastic ester elastomer (TPEE) which consists of a crystalline aromatic polyester block (mainly PBT) as the hard segment, and an uncrystalline polyether block (mainly poly-tetramethylene-ether-glycol) as the soft segment.

The features of PRIMALLOY™ include good mechanical strength, oil resistance, chemical resistance, flex fatigue resistance and has excellent heat resistance, as well as hardness stability within a wide temperature range.

Trade Name	Product Feature
RABALON™	Higher flexibility and mold ability than standard rubber
THERMORUN™	Highly versatile Elastomer
PRIMALLOY™	Improved flexibility and rubber elasticity versus standard TPEE
ZELAS™	Polymerized TPO, combines flexibility of polyethylene and heat resistance of polypropylen



For more information on PRIMALLOY, visit: <http://www.mcc-spd.com/en/product/primalloy/primalloy-detail.html>



## Verbatim PRIMALLOY - 1.75mm and 2.85mm

- PRIMALLOY material is a thermoplastic ester elastomer (TPEE) that delivers improved flexibility and rubber elasticity compared to standard TPEE materials
- High-performance mechanical strength and resistance to oil, chemicals, flex fatigue and heat
- Excellent low temperature properties and a high level of hardness stability across a wide temperature range
- Key application segments include automotive components, and a myriad of devices in home or industrial settings
- All filament is delivered in a vacuum bag, with desiccant, wound onto a spool.
- Made in Japan
- 24 month limited warranty



### PRIMALLOY - 2.85mm

**Diameter Accuracy:** 2.90 ± 0.05 mm  
**Filament Length:** 70 metres

### PRIMALLOY - 1.75mm

**Diameter Accuracy:** 1.75 ± 0.05 mm  
**Filament Length:** 190 metres

Reorder No.	Description
55501	Primalloy 2.85mm White 500g Reel
55500	Primalloy 1.75mm White 500g Reel



## Verbatim PLA - 1.75mm and 3mm

High performance Polylactic Acid (PLA) is a partially degradable bio-polymer derived from plants. With low flammability, it has an optimum operating temperature between 200°C and 220°C on most printers and no heated printer bed is required.



Reorder No.	Description
55267	Verbatim PLA Filament 1.75mm 1kg - Black
55268	Verbatim PLA Filament 1.75mm 1kg - White
55269	Verbatim PLA Filament 1.75mm 1kg - Blue
55270	Verbatim PLA Filament 1.75mm 1kg - Red
55271	Verbatim PLA Filament 1.75mm 1kg - Green
55272	Verbatim PLA Filament 1.75mm 1kg - Orange
55273	Verbatim PLA Filament 1.75mm 1kg - Yellow
55274	Verbatim PLA Filament 1.75mm 1kg - Natural Transparent
55275	Verbatim PLA Filament 1.75mm 1kg - Silver
55259	Verbatim PLA Filament 3mm 1kg - Black
55260	Verbatim PLA Filament 3mm 1kg - White
55261	Verbatim PLA Filament 3mm 1kg - Blue
55262	Verbatim PLA Filament 3mm 1kg - Red
55263	Verbatim PLA Filament 3mm 1kg - Green
55264	Verbatim PLA Filament 3mm 1kg - Yellow
55265	Verbatim PLA Filament 3mm 1kg - Natural Transparent
55266	Verbatim PLA Filament 3mm 1kg - Silver

### PLA - 1.75mm

**Diameter Accuracy:** 1.75 ± 0.05 mm  
**Filament Length:** 334 metres

### PLA - 3mm

**Diameter Accuracy:** 2.95 ± 0.05 mm  
**Filament Length:** 119 metres

#### Spool Dimensions - all filaments

**Spool Diameter:** 200mm

**Spool Depth:**

72mm

**Hub Diameter:**

102mm

**Hub Hole Diameter:**

51mm

**Gross Weight:**

1.5kg

## Verbatim ABS - 1.75mm and 3mm

High performance Acrylonitrile Butadiene Styrene (ABS) is a commonly used thermoplastic. It is not considered food safe. Highly durable and more flexible than PLA, it offers good heat resistance and a smooth finish. To avoid warping, a printer with a heated bed is required. The optimum operating temperature is between 230°C and 240°C on most printers.



Reorder No.	Description
55010	Verbatim ABS Filament 1.75mm 1kg - Black
55011	Verbatim ABS Filament 1.75mm 1kg - White
55012	Verbatim ABS Filament 1.75mm 1kg - Blue
55013	Verbatim ABS Filament 1.75mm 1kg - Red
55014	Verbatim ABS Filament 1.75mm 1kg - Green
55015	Verbatim ABS Filament 1.75mm 1kg - Transparent
55016	Verbatim ABS Filament 1.75mm 1kg - Silver
55007	Verbatim ABS Filament 3mm 1kg - White
55008	Verbatim ABS Filament 3mm 1kg - Black
55009	Verbatim ABS Filament 3mm 1kg - Transparent

### ABS - 1.75mm

**Diameter Accuracy:** 1.75 ± 0.05 mm  
**Filament Length:** 404 metres

### ABS - 3mm

**Diameter Accuracy:** 2.85 ± 0.05 mm

## Printer Compatibility

Our 3D printing filaments are manufactured to very tight tolerances and with the highest quality materials to ensure consistent feeding and stable printing.

Below is a list of printers that have been tested and confirmed to be compatible with our filaments.

They will work perfectly with many other printers as well, so please contact us if you have a printer that is not on this list.



Company	Model	Material	Diameter
Makerbot	Replicator 2	PLA/Primalloy	1.75mm
FELIXprinter	Felix 3.0	ABS	1.75mm
Marcha Technology	Witbox bq	PLA	1.75mm
3DChilli	JALOKIA	PLA/ABS	1.75mm
3D FreeSculpt	Stylo 3D FreeSculpt FX1	PLA	1.75mm
3D FreeSculpt	EX1	PLA	1.75mm
be3D	DeeGreen	PLA/ABS	1.75mm
WASP	DeltaWASP	PLA/ABS	1.75mm
WASP	PowerWASP	PLA/ABS	1.75mm
Sharebot	Kiwi	PLA/ABS	1.75mm
Sharebot	NG	PLA/ABS	1.75mm
Evo-tech	Evolizer	PLA/ABS	1.75mm
Robox	Robox	PLA/ABS	1.75mm
Zeepro	Zim	PLA/ABS	1.75mm
Ultimaker	Ultimaker	PLA	3.00mm
Ultimaker	Ultimaker 2	PLA	3.00mm
Builder	Builder	PLA	1.75mm
Mass Portal	Pharaoh ED	ABS/PLA/Primalloy	1.75mm
Zortrax	Zortrax M200	ABS	1.75mm
CraftUnique	Craftbot	ABS/PLA	1.75mm
3D Printers Factory NaviTracer Polska Sp. z o.o.	3D Gence	ABS/PLA	1.75mm
Aye Aye Labs	HotRod Henry	ABS/PLA/Primalloy	1.75mm

For more information on Verbatim's 3D Printing range,  
visit our website ([www.verbatim.com.au](http://www.verbatim.com.au)),  
contact your local account manager,  
or call Verbatim's customer service team (03 9790 8999)



[www.verbatim.com](http://www.verbatim.com)

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