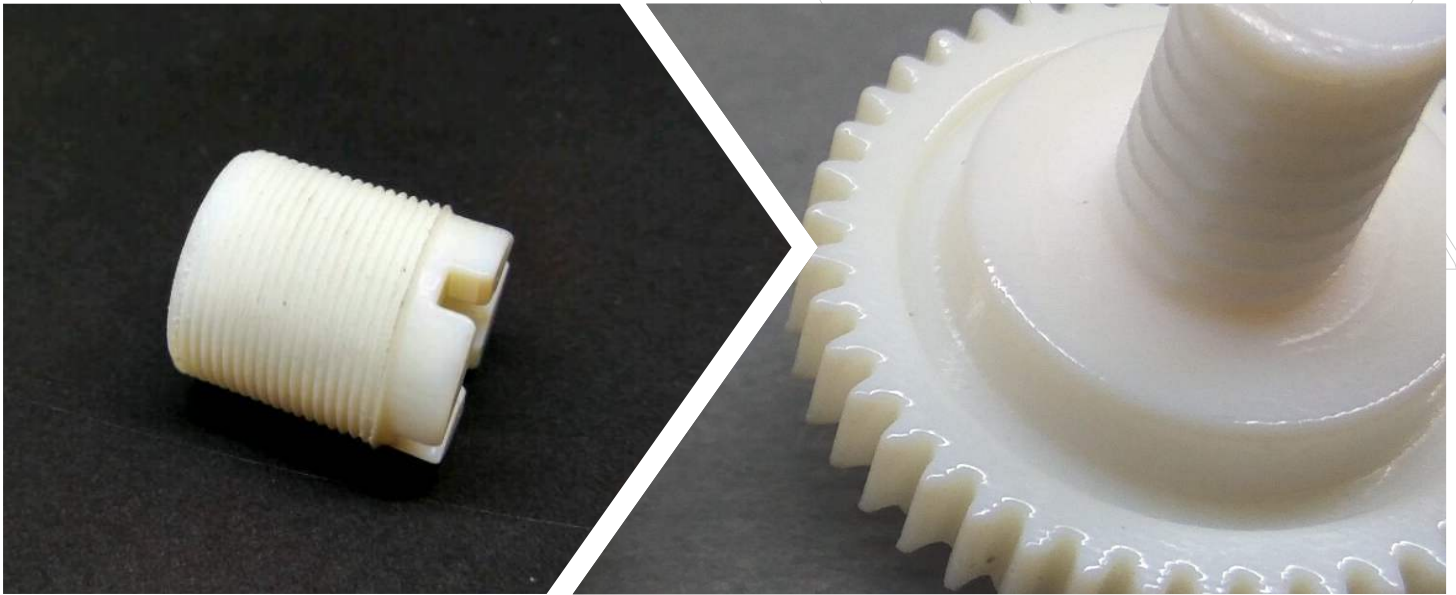


## Ultra Detail Plastic



### Generic Data :

Technical Name	Vero PureWhite
Process	Polyjet
Layer Thickness	16 $\mu\text{m}$
Accuracy	(+/-)100-200 $\mu\text{m}$
Maximum Build Size	490x390x200 mm

Ultra Detail Plastic is a part of the Vero family which consists of a range of materials viz., Vero WhitePlus, Vero Cyan etc. These are rigid, opaque materials which have shore hardness in the range of 83-86D. Due to its excellent feature retention capability, Ultra Detail Plastic parts are used in applications that require small, detailed features.

Ultra Detail Plastic comes in a pure white color and has a smooth surface finish. Since the parts are fabricated in Polyjet technology, they have support structure generation; these wax-like supports can be removed manually or with the help of a water-jet. Ultra Detail Plastic material can be blended with Tango-Elastic photopolymer to vary hardness, flexibility, translucency, and heat resistance.

### Characteristics

- + Rigid material with smooth surface finish
- + Excellent feature retention capability and dimensional accuracy
- + Can be blended with flexible materials
- + Post-processed part quality in as-build condition
- Unsuitable for snap-fits and live hinges
- Parts may warp when exposed to higher temperatures (greater than 45-50°C)

### Applications

- ✓ Small Aesthetic parts and display models with intricate features
- ✓ Parts with multi-material capabilities
- ✓ FMCG and packaging industries
- ✓ Automotive interiors

Material Properties	Value	Unit	Standard Test Method
Density (sintered powder)	1.17-1.18	g/cm <sup>3</sup>	ASTM D792
Color (Natural)	White	-	-
<b>Mechanical Properties</b>			
Ultimate Tensile Strength	50-65	MPa	ASTM D-638-03
Tensile Modulus	2000-3000	MPa	ASTM D-638-04
Elongation at Break	10-25	%	ASTM D-638-05
Flexural Strength	75-110	MPa	ASTM D-790-03
Flexural Modulus	2200-3200	MPa	ASTM D-790-04
Izod Impact notched	20-30	J/m	ASTM D-256-06
Shore Hardness	83-86	Scale D	-
<b>Thermal Properties</b>			
Glass Transition Temperature (Tg)	52-54	°C	DMA, E>>
Heat Deflection Temp. under load			
@0.45 MPa	45-50	°C	ASTM D-648-06
@1.8 MPa	45-50	°C	ASTM D-648-07