



FullCure Materials

Support Your Application

- Elongation at break of 20% and 44% for rigid models enables fit and function
- Elongation at break of 47% and 218% for rubber-like materials
- Models ready to use, no extra finishing required
- Models can be handled right off the tray
- Paint readily adheres to model surfaces
- Easy to remove gellike support material ensures no hard grid edges
- Single support material for all materials
- High accuracy models



FIVE STAR PLASTICS

engineering • rapid prototyping • tooling • injection molding • assembly

Turning your ideas into reality™



Support your Applications

The FullCure® line of photopolymer resins open up a whole world of possibilities for users of 3-dimensional printings.

Based on Objet's unique ultra-thin-layer Polyjet™ technology, FullCure® resins are used to create accurate, highly detailed three-dimensional models for a wide range of applications. Unlike models created by other technologies, Objet-made parts are fully cured during the build process and can be handled immediately after build.

The FullCure® line includes several types of flexible and rigid model materials. The FullCure® support material enables users to produce any geometry, including overhangs and undercuts.

The FullCure® line currently includes the following materials, with more to come in the near future:

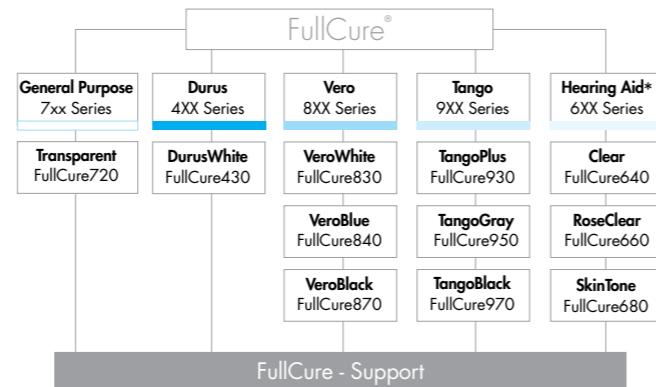
FullCure®720 - General-purpose resin, offers excellent technical properties in a transparent color.

Vero materials - Feature opaque colors and improved mechanical properties, offering users excellent detail visualization and even wider range of applications.

Tango materials - offer users highly flexible materials with different levels of elasticity, enabling a close "touch and feel" match for any design.

Key Advantages

- Elongation at break of 20% for rigid models enables fit and function.
- Elongation at break of 47% and 218% for rubber-like materials.
- Models ready to use, no extra finishing required.
- Models can be handled right off the tray.
- Paint readily adheres to model surfaces.
- Easy to remove gel-like support materials ensures no hard grid edges.
- Single support material for all materials.
- High accuracy models.



* See Objet Hearing Aid brochure

Tango

TangoPlus - FullCure930

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength at Break	D-412	MPa	1.455	psi	211
Tensile Modulus at 20% Strain	D-413	MPa	0.146	psi	21
Tensile Modulus at 30% Strain	D-414	MPa	0.185	psi	27
Tensile Modulus at 50% Strain	D-415	MPa	0.263	psi	38
Elongation at Break	D-412	%	218	%	218.0
Compressive Set, 22 Hr, 750C	D-395	%	4.4	%	4.4
Shore A Hardness	D-2240	Scale A	27	Scale A	27
Ross Flex	D-1052		Above 150,000		Above 150,000
Tensile Tear Resistance	D-624	Kg/cm	3.47	Lb/in	20
Tg	DSC (-80°C+100°C)	C°	-9.6	F°	15



TangoGray - FullCure950

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength	D-412	MPa	4.36	psi	632
Elongation at Break	D-412	%	47	%	47.0
Compressive Set	D-395	%	1	%	1
Shore A Hardness	D-2240	Scale A	75	Scale A	75
Tensile Tear Resistance	D-624	Kg/cm	9.5	Lb/in	54
Tg	DSC (-80°C+100°C)	C°	2.6	F°	37



TangoBlack - FullCure970

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength	D-412	MPa	2	psi	290
Elongation at Break	D-412	%	47.7	%	47.7
Compressive Set	D-395	%	0.8	%	1
Shore A Hardness	D-2240	Scale A	61	Scale A	61
Tensile Tear Resistance	D-624	Kg/cm	3.8	Lb/in	21
Tg	DSC (-80°C+100°C)	C°	-10.7	F°	13



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Support Your Application



Vero

VeroWhite - FullCure830

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength	D-638-03	MPa	49.8	psi	7221
Modulus of Elasticity	D-638-04	MPa	2495	psi	361775
Elongation at Break	D-638-05	%	20	%	20
Flexural Strength	D-790-03	MPa	74.6	psi	10817
Flexural Modulus	D-790-04	MPa	2137	psi	309865
Izod Notched Impact	D-256-06	J/m	24.1	ft lb/in	0.45
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 MPa	D-648-06	C°	43	F°	109
HDT at 1.82 MPa	D-648-07	C°	40	F°	104
Tg	DMA, E°	C°	58	F°	136
Ash Content	NA	%	<0.4	%	<0.4
Water Absorption	D570-98 24 Hr	%	1.15	%	1.15



VeroBlue - FullCure840

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength	D-638-03	MPa	55.1	psi	7990
Modulus of Elasticity	D-638-04	MPa	2740	psi	397300
Elongation at Break	D-638-05	%	20	%	20
Flexural Strength	D-790-03	MPa	83.6	psi	12122
Flexural Modulus	D-790-04	MPa	1983	psi	287535
Compressive Strength	D-695-02	MPa	79.3	psi	11499
Izod Notched Impact	D-256-06	J/m	23.6	ft lb/in	0.44
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 MPa	D-648-06	C°	48.8	F°	120
HDT at 1.82 MPa	D-648-07	C°	44.8	F°	113
Tg	DMA, E°	C°	48.7	F°	120
Ash Content	NA	%	<0.3	%	<0.3
Water Absorption	D570-98 24 Hr	%	1.54	%	1.54



VeroBlack - FullCure870

Property	ASTM	Metric		Imperial	
		MPa		psi	
Tensile Strength	D-638-03	MPa	50.7	psi	7352
Modulus of Elasticity	D-638-04	MPa	2192	psi	317840
Elongation at Break	D-638-05	%	17.7	%	18
Flexural Strength	D-790-03	MPa	79.6	psi	11542
Flexural Modulus	D-790-04	MPa	2276	psi	330020
Izod Notched Impact	D-256-06	J/m	23.9	ft lb/in	0.45
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 MPa	D-648-06	C°	47	F°	117
HDT at 1.82 MPa	D-648-07	C°	42.9	F°	109
Tg	DMA, E°	C°	62.7	F°	145
Water Absorption	D570-98 24 Hr	%	1.01	%	1.01



General Purpose

FullCure720

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	60.3	psi	8744
Modulus of Elasticity	D-638-04	MPa	2870	psi	416150
Elongation at Break	D-638-05	%	20	%	20
Flexural Strength	D-790-03	MPa	75.8	psi	10991
Flexural Modulus	D-790-04	MPa	1718	psi	249110
Compressive Strength	D-695-02	MPa	84.3	psi	12224
Izod Notched Impact	D-256-06	J/m	23.6	ft lb/in	0.44
Shore Hardness	Scale D	Scale D	83	Scale D	83
Rockwell Hardness	Scale M	Scale M	81	Scale M	81
HDT at 0.45 MPa	D-648-06	C°	48.4	F°	119
HDT at 1.82 MPa	D-648-07	C°	44.4	F°	112
Tg	DMA, E"	C°	48.7	F°	120
Ash Content	NA	%	<0.01	%	<0.01
Water Absorption	D570-98 24 Hr	%	1.53	%	1.53



Durus

DurusWhite - FullCure430

Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	MPa	21.3	psi	3089
Modulus of Elasticity	D-638-04	MPa	1135.8	psi	164691
Elongation at Break	D-638-05	%	44.2	%	44
Flexural Strength	D-790-03	MPa	33.2	psi	4814
Flexural Modulus	D-790-04	MPa	1026.1	psi	148785
Compressive Strength	D-695-02	MPa	30.7	psi	4452
Izod Notched Impact	D-256-06	J/m	44.22	ft lb/in	0.83
Shore Hardness	D-2240-03	Scale D	76	Scale D	76
Rockwell Hardness	D-785-03	Scale M	97	Scale M	97
HDT at 0.45 MPa	D-648-06	C°	36.3	F°	98
HDT at 1.82 MPa	D-648-07	C°	32.6	F°	91
Tg	DMA, E"	C°	35.9	F°	97
Water Absorption	D570-98 24 Hr	%	1.69	%	1.69



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