

Simulate Standard Plastics – Transparent

Objet FullCure720™ is Objet's original multi-purpose transparent material for standard plastics simulation.

Objet VeroClear™ is a rigid, colorless material featuring great dimensional stability for general purpose, fine detail model building and visual simulation of transparent thermoplastic such as PMMA.

Ideal for:

- Form and fit testing of clear or see-through parts
- Glass, eye-wear, lighting covers and light-cases
- Visualization of liquid flow
- Color dyeing
- Medical applications
- Artistic and exhibition modeling



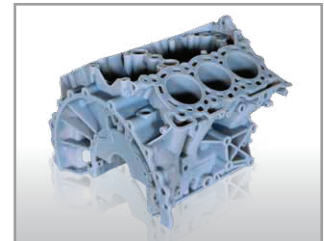
Simulate Standard Plastics – Rigid & Opaque

The Objet Vero family of rigid opaque materials includes Objet VeroWhitePlus™, Objet VeroGray™, Objet VeroBlue™ and Objet VeroBlack™.

Combining dimensional stability and high-detail visualization, the Objet Vero family is intended for standard plastics simulation and model creations that closely resemble the 'look' of the end product.

Ideal for:

- Wide range of fit and form testing
- Moving parts and assembled parts
- Exhibition and sales & marketing models
- Assembly of electronic components
- Objet VeroBlue™ is ideal for silicon molding



Simulate Standard Plastics – Polypropylene

Objet DurusWhite™ material is ideal for a broad range of applications that require the appearance, flexibility, strength and toughness of Polypropylene. Properties include Izod notched impact of 44 J/m, elongation at break of 44% and flexural modulus of 1026 MPa.

Ideal for:

- Reusable containers and packaging
- Flexible, snap-fit applications and living hinges
- Toys, battery cases, laboratory equipment, loudspeakers and automotive components



Transparent Materials

Objet FullCure720

	ASTM	Units	Metric	Units	Imperial
Tensile Strength	D-638-03	MPa	50-65	psi	7250-9450
Elongation at break	D-638-05	%	15-25	%	15-25
Modulus of elasticity	D-638-04	MPa	2000-3000	psi	290,000-435,000
Flexural Strength	D-790-03	MPa	80-110	psi	12000-16000
Flexural Modulus	D-790-04	MPa	2700-3300	psi	390,000-480,000
HDT, °C @ 0.45 MPa	D-648-06	°C	45-50	°F	113-122
HDT, °C @ 1.82 MPa	D-648-07	°C	45-50	°F	113-122
Izod Notched Impact	D-256-06	J/m	20-30	ft lb/inch	0.375-0.562
Water Absorption	D-570-98 24hr	%	1.5-2.2	%	1.5-2.2
Tg	DMA, E _s	°C	48-50	°F	118-122
Shore Hardness (D)	Scale D	Scale D	83-86	Scale D	83-86
Rockwell Hardness	Scale M	Scale M	73-76	Scale M	73-76
Polymerized density	ASTM D792	g/cm ³	1.18-1.19		
Ash content	USP281	%	0.01-0.02	%	0.01-0.02

Objet VeroClear FullCure810

	ASTM	Units	Metric	Units	Imperial
Tensile Strength	D-638-03	MPa	50-65	psi	7250-9450
Elongation at break	D-638-05	%	10-25	%	10-25
Modulus of elasticity	D-638-04	MPa	2000-3000	psi	290,000-435,000
Flexural Strength	D-790-03	MPa	75-110	psi	11000-16000
Flexural Modulus	D-790-04	MPa	2200-3200	psi	320,000-465,000
HDT, °C @ 0.45 MPa	D-648-06	°C	45-50	°F	113-122
HDT, °C @ 1.82 MPa	D-648-07	°C	45-50	°F	113-122
Izod Notched Impact	D-256-06	J/m	20-30	ft lb/inch	0.375-0.562
Water Absorption	D-570-98 24hr	%	1.1-1.5	%	1.1-1.5
Tg	DMA, E _s	°C	52-54	°F	126-129
Shore Hardness (D)	Scale D	Scale D	83-86	Scale D	83-86
Rockwell Hardness	Scale M	Scale M	73-76	Scale M	73-76
Polymerized density	ASTM D792	g/cm ³	1.04-1.05		
Ash content	USP281	%	0.02-0.06	%	0.02-0.06

Rigid Opaque Materials

Objet VeroGray FullCure850, VeroBlack FullCure870, VeroWhitePlus FullCure835

	ASTM	Units	Metric	Units	Imperial
Tensile Strength	D-638-03	MPa	50-65	psi	7250-9450
Elongation at break	D-638-05	%	10-25	%	10-25
Modulus of elasticity	D-638-04	MPa	2000-3000	psi	290,000-435,000
Flexural Strength	D-790-03	MPa	75-110	psi	11000-16000
Flexural Modulus	D-790-04	MPa	2200-3200	psi	320,000-465,000
HDT, °C @ 0.45 MPa	D-648-06	°C	45-50	°F	113-122
HDT, °C @ 1.82 MPa	D-648-07	°C	45-50	°F	113-122
Izod Notched Impact	D-256-06	J/m	20-30	ft lb/inch	0.375-0.562
Water Absorption	D-570-98 24hr	%	1.1-1.5	%	1.1-1.5
Tg	DMA, E _∞	°C	52-54	°F	126-129
Shore Hardness (D)	Scale D	Scale D	83-86	Scale D	83-86
Rockwell Hardness	Scale M	Scale M	73-76	Scale M	73-76
Polymerized density	ASTM D792	g/cm ³	1.17-1.18		
Ash content	USP281	%	0.02-0.06	%	0.01-0.02

Objet VeroBlue FullCure840

	ASTM	Units	Metric	Units	Imperial
Tensile Strength	D-638-03	MPa	50-60	psi	7250-8700
Elongation at break	D-638-05	%	10-25	%	15-25
Modulus of elasticity	D-638-04	MPa	2000-3000	psi	290,000-435,000
Flexural Strength	D-790-03	MPa	75-110	psi	12000-16000
Flexural Modulus	D-790-04	MPa	2200-3200	psi	390,000-480,000
HDT, °C @ 0.45 MPa	D-648-06	°C	45-50	°F	113-122
HDT, °C @ 1.82 MPa	D-648-07	°C	45-50	°F	113-122
Izod Notched Impact	D-256-06	J/m	20-30	ft lb/inch	0.375-0.562
Water Absorption	D-570-98 24hr	%	1.1-1.5	%	1.5-2.2
Tg	DMA, E _∞	°C	52-54	°D	118-122
Shore Hardness (D)	Scale D	Scale D	83-86	Scale D	83-86
Rockwell Hardness	Scale M	Scale M	73-76	Scale M	73-76
Polymerized density	ASTM D792	g/cm ³	1.04-1.05		
Ash content Vblack	USP281	%	0.21-0.22	%	0.21-0.22

Polypropylene-like Materials

Objet DurusWhite FullCure430

	ASTM	Units	Metric	Units	Imperial
Tensile Strength	D-638-03	MPa	20-30	psi	2900-4350
Elongation at break	D-638-05	%	40-50	%	40-50
Modulus of elasticity	D-638-04	MPa	1000-1200	psi	145,000-175,000
Flexural Strength	D-790-03	MPa	30-40	psi	4350-5800
Flexural Modulus	D-790-04	MPa	1200-1600	psi	175,000-230,000
HDT, °C @ 0.45 MPa	D-648-06	°C	37-42	°F	99-108
HDT, °C @ 1.82 MPa	D-648-07	°C	32-34	°F	90-93
Izod Notched Impact	D-256-06	J/m	40-50	ft lb/inch	0.749-0.937
Water Absorption	D-570-98 24hr	%	1.5-1.9	%	1.5-1.9
Tg	DMA, E _∞	°C	35-37	°F	95-99
Shore Hardness (D)	Scale D	Scale D	74-78	Scale D	74-78
Rockwell Hardness	Scale M	Scale M	no data	Scale M	no data
Polymerized density	ASTM D792	g/cm ³	1.15-1.17		
Ash content	USP281	%	0.10-0.12	%	0.1-0.12