

Digital ABS Plus

Digital ABS Plus™ is designed to simulate standard ABS plastics by combining high-temperature resistance with toughness. Suitable for parts that require PolyJet™ technology's highest possible impact resistance and shock absorption, Digital ABS Plus significantly improves the mechanical performance of parts and prototypes for design verification and functional performance testing.

Get better impact strength with high-temperature resistance, toughness and superior finish.

Digital ABS Plus is ideal for rapid prototyping snap-fit parts for high or low temperature use, functional designs with multi-material versatility and flexibility, molds, manufacturing tools, electrical parts and more.

Mechanical Properties	Test Method	Value
Tensile Strength	D-638-03	55 – 60 MPa (8,000 – 8,700 psi)
Elongation at Break	D-638-05	25 – 40%
Modulus of Elasticity	D-638-04	2,600 – 3,000 MPa (375,000 – 435,000 psi)
Flexural Strength	D-790-03	65 – 75 MPa (9,500 – 11,000 psi)
Flexural Modulus	D-790-04	1,700 – 2,200 MPa (245,000 – 320,000 psi)
HDT, oC @ 0.45MPa	D-648-06	58 – 68 °C (136 – 154 °F)
HDT, oC @ 0.45MPa after thermal post treatment procedure A	D-648-06	82 – 90 °C (180 – 194 °F)
HDT, oC @ 0.45MPa after thermal post treatment procedure B	D-648-06	92 – 95 °C (198 – 203 °F)
HDT, oC @ 1.82MPa	D-648-07	51 – 55 °C (124 – 131 °F)
Izod Notched Impact	D-256-06	90 – 115 J/m (1.69 – 2.15 ft lb/in)
Tg	DMA, E ₂	47 – 53 °C (117 – 127 °F)
Shore Hardness (D)	Scale D	85 – 87 Scale D
Rockwell Hardness	Scale M	67 – 69 Scale M
Polymerized Density	ASTM D792	1.17 – 1.18 g/cm ³

Digital ABS Plus

System Availability	Layer Thickness Capability	Support Structure	Available Colors
Objet260/350/500 Connex3™	Digital Material 2/3 mode: 30 microns (0.0012 in.)	SUP705 (WaterJet removable) SUP706B (soluble)	<ul style="list-style-type: none"> ■ Green (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)
Objet1000 Plus™	Digital Material: 34 microns (0.0013 in.) High Speed mode: 34 microns (0.0013 in.) High Quality mode: 16 microns (0.0006 in.)	SUP705 (WaterJet removable)	<ul style="list-style-type: none"> ■ Green (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)
Stratasys J735™, Stratasys J750™	High Mix or High Speed mode: 27 microns (0.0011 in.) High Quality mode: 14 microns (0.00055 in.)	SUP705 (WaterJet removable) SUP706B ¹ (soluble)	<ul style="list-style-type: none"> ■ Green (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)
J4100™	Digital Material: 27 microns (0.001 in.)	SUP705 (WaterJet removable)	<ul style="list-style-type: none"> ■ Green (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)
Stratasys J750 Digital Anatomy™	Horizontal build layers down to 14 microns (0.00055 in.)	SUP705™ (WaterJet removable) SUP706B™ (soluble) GelMatrix™ (WaterJet removable)	<ul style="list-style-type: none"> ■ Green (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)
J826™ Prime/J835™/ J850™ Pro/J850 Prime	High Speed mode: 27 microns (0.001 in.) High Mix mode: 27 microns (0.001 in.) Super High Quality mode: 55 microns (0.002 in.) High Quality mode: 14 microns (0.00055 in.)	SUP705 (WaterJet removable) SUP706B (soluble)	<ul style="list-style-type: none"> ■ Green² (RGD515 Plus and RGD535) ■ Ivory (RGD515 Plus and RGD531)

¹ Not compatible in HQ mode for Stratasys J750.

² Digital ABS Plus in Green not available on J850 Pro.

Stratasys Headquarters

7665 Commerce Way,
Eden Prairie, MN 55344
+1 800 801 6491 (US Toll Free)
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

1 Holtzman St., Science Park,
PO Box 2496
Rehovot 76124, Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

stratasys.com

ISO 9001:2015 Certified

© 2021 Stratasys Ltd. All rights reserved. Stratasys, Stratasys signet, PolyJet, Objet250 Connex3, Objet350 Connex3, Objet500 Connex3, Objet1000 Plus, SUP705, SUP706B, GelMatrix, Stratasys J750 Digital Anatomy, J826, J835, J850, J4100, Digital ABS Plus, Digital ABS2 Plus, VeroBlack, VeroCyan, VeroMagenta, VeroMagentaV, VeroYellow, VeroYellowV, VeroWhite are trademarks or registered trademarks of Stratasys Ltd. and/or its subsidiaries or affiliates and may be registered in certain jurisdictions. All other trademarks belong to their respective owners. Product specifications subject to change without notice. MDS_PJ_DigitalABSPlus_0121b

