

3D PRINTING WITH PLASTICS OF CONFIGURABLE HARDNESS

We offer a wide range of materials in this category. By mixing different resins, we can produce diverse composite materials with varying characteristics and benefits. These materials also lend themselves well to post-production finishing.

MATERIAL				VeroClear	VeroWhite+	Digital ABS	TangoBlack+
							
	Properties	Test method	Unit				
Properties	Tensile strength	DIN-638-03	MPa	50 – 60	50 – 65	55 – 60	0.8 – 1.5
	Elongation at break	DIN-658-05	%	10 – 25	10 – 25	25 – 40	170 – 220
	Elastic modulus	DIN-638-04	MPa	2,000 – 3,000	2,000 – 3,000	1,700 – 2,200	–
	Bending strength	DIN-790-03	MPa	75 – 110	75 – 110	65 – 75	–
	Heat deflection temperature	DIN-648-07 @ 1.82 MPa	°C	45 – 50	45 – 50	bis 95°C	40
	Shore hardness	A- or D-Scale	–	83 – 86 D	83 – 85 D	85 – 87	26 – 28 A
	Residual ash content	USP281	%	0.02 – 0.06	< 0.3	–	–

MATERIAL				DM 9840	DM 9850	DM 9860	DM 9870	DM 9885	DM 9895
									
	Properties	Test method	Unit						
Properties	Tensile strength	DIN-638-03	MPa	1.3 – 1.8	1.9 – 3.0	2.5 – 4.0	3.5 – 5.0	5.0 – 7.0	8.5 – 10.0
	Elongation at break	DIN-658-05	%	110 – 130	95 – 110	75 – 85	65 – 80	55 – 65	35 – 45
	Elastic modulus	DIN-638-04	MPa	–	–	–	–	–	–
	Bending strength	DIN-790-03	MPa	–	–	–	–	–	–
	Heat deflection temperature	DIN-648-07 @ 1.82 MPa	°C	40	40	40	40	40	40
	Shore hardness	A- or D-Scale	—	40 A	50 A	60 A	70 A	85 A	95 A
	Color	–	—	black	black	black	black	black	black