

Technical Data Sheet - 21/11/2017

Material: B20 - Weed for 3D Printing

Laboratory: Superlab SRL - Via Ruini, 3 - 42013 Salvaterra (RE)

Properties	Conditions	Standard	Units	Values	
				48 hours @ 23 C° 50% R.H.	3 hours at 100 C° conditioned

Physical Properties

Specific Gravity	@ 23 C°	ISO 1183	g/cc	1,2615	-
Molding Shrinkage - Longitudinal	@ 23 C°	ASTM D 995	%	0,28	-
Fluidity - MVR Melt Volume Rate	190 C°	ISO 1133	cc/10'	76,0	-
Fluidity - MFR Melt Flow Rate	2,16 kg		g/10'	86,9	-

Mechanical Properties

Yield Stress	@ 23 C°	ISO 527	Mpa	32,0	27,9
Elongation at Yield	@ 23 C°		%	1,3	1,3
Stress at Break	@ 23 C°		MPa	19,4	26,1
Elongation at Break	@ 23 C°		%	8,8	1,7
Tensile Modulus	@ 23 C°		MPa	3887	3516
Flexural Maximum Strength	@ 23 C°	ISO 178	MPa	56,2	46,9
Flexural Modulus	@ 23 C°		MPa	3455	4170
IZOD Impact Resistance - notched	@ 23 C°	ISO 180	KJ/m^2	2,4	2,8

Thermal Properties

Heat Deflection temperature under load	1,8 Mpa	ISO 75	C°	49,5	64,4
Melting Temperature	DSC	ISO 11357	C°	150,5	151,3
Glass Transition Temperature (Tg)	DSC	ISO 11357	C°	53,5	52,9

Injection Parameters

Drying Granules	10 hours in vacuum stove at 90 C°
Barrel Temperature Profile	150 - 160 - 170 - 180 C°
Mould Temperatures	30 C°
Screw Speed	300 rpm
Injection Speed	slow