



Liquid Crystal  
**MAGNA**

**HIGH  
PERFORMANCE  
MATERIALS**



**MATERIALS**



**HIGH PERFORMANCE DAYLIGHT RESINS**



**PHOTOCENTRIC  
& BASF**

**Dental Model**  
*Beige / White*

Our Dental Model 3D printing resin has been formulated to create high resolution dental models, with fast printing cycle and post exposing. This resin has been developed in conjunction with dental technologists to derive optimal colour, surface feel and thermoforming characteristics.

**Durable**  
*Black*

The Photocentric durable range of 3D printing materials is the most versatile material we manufacture. Resisting impact, compression, bending, and stress fatigue without breaking or deforming.

**EPD1006**  
*Black*

Good toughness and impact resistance  
Easy to print, with nice surface finish and intricate geometries  
Ideal for prototyping, jigs and fixtures

**High Tensile White**  
*White*

When strong parts are required, Magna High Tensile is the resin of choice. Capable of producing incredibly detailed parts along with great strength, higher than that of injection moulded Polycarbonate with similar mechanical behaviour.

**Duramax**  
*Black*

Our Daylight Magna Duramax 3D printing resin has been created for printing functional parts that need to be very durable, long-lasting and possess high impact strength. Thick objects are stiff but can be made to flex under strain, while returning to their original shape.

**EPD1086**  
*Clear*

Well-balanced mechanical properties  
Cost-effective solution for a wide range of applications

**High Temp DL400**  
*Amber*

The Photocentric HighTemp 400DL 3D printer resin can handle temperatures of up to 230°C without bending or deforming. Simulating the strength and rigidity of glass filled Nylon 6.

**Durable DL110H**  
*Black / White*

Incredibly versatile resin Durable DL110H can handle impact, compression, bending and stress fatigue without breaking or deforming.

**EPS2006**  
*Black*

Very high stiffness and temperature resistance  
Ideal for large-scale objects  
Printed parts exhibit intricate detail

**Concept**  
*Green*

Bring your model figurines and other designs to life with the Magna Concept Green resin. Print jewellery prototypes or detailed figurines with high strength, durability, and most importantly high accuracy with finished smooth surfaces. Figurine prints can be shown as is or easily painted by airbrush.

**Draft**  
*Blue*

Our Daylight Magna Draft 3D printing resin is our fastest printing resin yet with 350 µm layer thickness. Specifically designed to allow for detailed, large parts to be printed in shorter times for rapid prototyping or production. The end parts manufactured exhibit very high strength comparable to acrylic and polyimide.

**EPS3500**  
*Amber / Clear*

Optimum combination of high strength, high stiffness, and good impact resistance. Low water uptake. Ideal for engineering prototypes, also when translucency is required



**Hard**  
*Black*

The Photocentric Hard resin range is a rigid, durable and long-lasting 3D printing material which guarantees parts display the finest details possible. Parts will not deform when pressure is applied.

**EPD4006**  
*Black*

Extremely tough and durable material ideal for functional applications  
Superior impact resistance. Easy to print and smooth surface finish

**Photocentric**

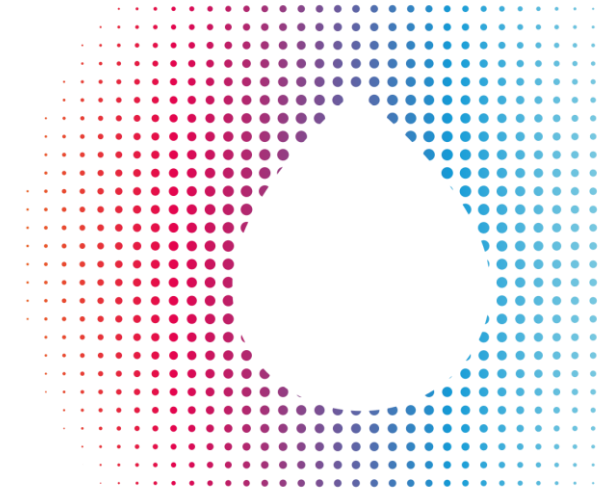
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# Resin specifications



	Durable	Duramax	Durable DL110H	High Tensile White	Draft	Hard	Concept	Dental Model White	Dental Model Beige	High Temp DL400	EPD1006	EPD1086	EPD2006	EPD3500	EPD4006
Ultimate Tensile strength (MPa) ASTM D638	42	50	60	81	84	52	61	63	56	80	40	42	81	60	45
Elongation (%) ASTM D638	14	19	10	4.8	4.4	10	3.7	4.3	2.7	4	25	26	10.3	19	45
Tensile Modulus (MPa) ASTM D638	1570	1760	2300	3060	3200	2600	2810	3020	2750	4000	1500	1800	2370	2750	1800
Hardness (Shore D) ASTM D2240	60	70	85	92	90	86	92	90	84	95	79	81	80	79	78
Flexural Strength (Mpa)	28	28	55	95	109	65	87	92	84	109	52	67	90	110	70
Impact Properties - notched izod ASTM D256	91	51	119	22.7	22.6	55	32.6	22.7	19.5	15.6	11	28	11	25	46
Heat Deflection (°C)	45	65	70	95	75	65	85	95		230	44	53	81	70	54
Biocompatibility: Cytotoxicity ISO 10993-5					Passed				Passed	Passed	Passed				
Comparable Thermoplastic	PLA	ABS		PA12	PA12	PMMA	PA12	-	-	PA12					
24 hr soak in Water (Tensile Modulus Change)				-5.5%	-4.1%	-6.0%				-2.2%					
7 days soak in Water (Tensile Modulus Change)				-11.2%	-8.1%	-9.9%				-4.3%					