



Liquid Crystal  
**OPUS**

## BASF Ultracur3D® UV Resins Overview

Approved for Liquid Crystal Opus

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Ultracur3D® Resin	Colour	Ultimate Tensile Strength (MPa)	Elongation at break (%)	Tensile Modulus (MPa)	Shore Hardness	Flexural Strength (MPa)	Flexural Modulus (MPa)	Impact Properties Notched izod (J/m)	Tear Strength (kN/m)	Rebound Resilience (%)	Heat Deflection (°C) at 0.45 MPa	Biocompatibility Cytotoxicity ISO 10993-5	Skin irritation and sensitization ISO 10993-10	Water Absorption Short Term (24 hours) (%)	Viscosity (mPas)	Density (g/cm³)	TDS	
Rigid	RG 35	Clear	80	6	2600	85D	110	2400	23	-	-	83	Passed	Passed	0.33	600	1.12	<a href="#">View TDS</a>
	RG 50	Clear	63	4	2300	85D	87	2100	11	-	-	66	-*	-*	1.12	65	1.11	<a href="#">View TDS</a>
	RG 1100	Clear	70	5	3080	85D	119	2880	16	-	-	116	-*	-*	0.32	201	1.12	<a href="#">View TDS</a>
Durable	ST 45 B	Black	53	21	2000	80D	95	2100	30	-	-	63	Passed	-*	-*	230	1.12	<a href="#">View TDS</a>
	ST 45 M	Clear	58	20	2300	80D	100	2200	19	-	-	67	Passed	-*	-*	230	1.12	<a href="#">View TDS</a>
	ST 80	Clear	35	20	1500	80D	60	1700	24	-	-	46	Passed	Passed	0.5	400	1.08	<a href="#">View TDS</a>
	ST 1400	Clear	45	43	1900	78D	80	1540	43	-	-	57	-*	-*	0.33	280	1.12	<a href="#">View TDS</a>
Flexible	EL 4000	Clear	11	172	42	90A	-	-	-	37	30	-	-*	-*	2.3	350	1.06	<a href="#">View TDS</a>
	FL 60	Clear	4	90	-	60A	-	-	-	9	11	-	-*	-*	1.45	400	1.08	<a href="#">View TDS</a>
Dental	DM 2505	Beige	48	4	2200	73D	83	2150	-	-	-	-	-*	-*	0.85	80	1.1	<a href="#">View TDS</a>

\*Contact Photocentric for more information



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## BASF Ultracur3D® Resins Workflow

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**FORWARD AM**  
Innovating Additive Manufacturing

Ultracur3D® Resin	Print Profiles available on Photocentric Studio	Wash/Rinse <small>Rinse with warm water</small>	Post Cure	Wash Unit	Cleaning Medium	Post Cure Unit
RG 35	100µm	Wash: ≤15 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
RG 50	50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
RG 1100	25µm, 50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
ST 45 B	25µm, 50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	2hrs @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
ST 45 M	50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	2hrs @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
ST 80	50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
ST 1400	50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
EL 4000	50µm, 100µm	Wash: ≤15 minues Rinse: 2 minutes	2hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
FL 60	100µm	Wash: ≤15 minues Rinse: 2 minutes	2hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+
DM 2505	25µm, 50µm, 100µm	Wash: ≤10 minues Rinse: 2 minutes	1hr @ 60°C	Photocentric Wash 15	Photocentric Resin Cleaner 30	Photocentric Cure M+

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