

Supplementary Materials: Stereolithography Apparatus Evolution: Enhancing Throughput and Efficiency of Pharmaceutical Formulation Development

Carlo Curti, Daniel J. Kirby and Craig A. Russell *

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Table S1. % *w/w* composition of the 156 photopolymer formulations prepared and screened. Printability score assigned per formulation at each tested printing resolution and the classification group of each formulation are reported. Costs/mL per formulation are described in the right column.

	PEGDA 250	PEGDA 575	PEGDA 700	PEG 300	Propylene Glycol	Glycerol	N-Vinyl Pyrrolidone	TPO	PS @ 25 µm	PS @ 50 µm	PS @ 100 µm	Group assigned	Cost (£/mL)
F1	99.00	-	-	-	-	-	-	1.00	5*	5*	6	B1	0.25
F2	99.50	-	-	-	-	-	-	0.50	5*	5*	6	B1	0.23
F3	99.90	-	-	-	-	-	-	0.10	4	5	5*	B1	0.21
F4	99.95	-	-	-	-	-	-	0.05	4	4	4	A	0.21
F5	-	99.00	-	-	-	-	-	1.00	6	6	6	A	0.24
F6	-	99.50	-	-	-	-	-	0.50	6	6	6	A	0.22
F7	-	99.90	-	-	-	-	-	0.10	5 *	6 *	6 *	B1	0.20
F8	-	99.95	-	-	-	-	-	0.05	4	6	6	A	0.20
F9	-	-	99.00	-	-	-	-	1.00	6	6	6	A	0.24
F10	-	-	99.50	-	-	-	-	0.50	6	6	6	A	0.22
F11	-	-	99.90	-	-	-	-	0.10	5*	6*	6	B1	0.20
F12	-	-	99.95	-	-	-	-	0.05	5*	6*	5*	B1	0.20
F13	86.50	-	-	12.50	-	-	-	1.00	5*	6	6	B1	0.23
F14	74.00	-	-	25.00	-	-	-	1.00	6	6	6	A	0.21
F15	49.00	-	-	50.00	-	-	-	1.00	6	6	6	A	0.18
F16	87.00	-	-	12.50	-	-	-	0.50	6	6	6	A	0.21
F17	74.50	-	-	25.00	-	-	-	0.50	6	6	6	A	0.19
F18	49.50	-	-	50.00	-	-	-	0.50	6	6	6	A	0.16
F19	87.40	-	-	12.50	-	-	-	0.10	5	5 *	5 *	B1	0.19
F20	74.90	-	-	25.00	-	-	-	0.10	6	6	6	A	0.17
F21	49.90	-	-	50.00	-	-	-	0.10	6	6	6	A	0.14
F22	87.45	-	-	12.50	-	-	-	0.05	4	4	4	A	0.19
F23	74.95	-	-	25.00	-	-	-	0.05	6	6	6*	B	0.17
F24	49.95	-	-	50.00	-	-	-	0.05	6	6	6	A	0.14
F25	-	86.50	-	12.50	-	-	-	1.00	6	6	6*	B	0.23
F26	-	74.00	-	25.00	-	-	-	1.00	6	6	6	A	0.21
F27	-	49.00	-	50.00	-	-	-	1.00	6	6	6	A	0.18
F28	-	87.00	-	12.50	-	-	-	0.50	6	6	6	A	0.20

F29	-	74.50	-	25.00	-	-	-	0.50	6	6*	6	B	0.19
F30	-	49.50	-	50.00	-	-	-	0.50	6	6	6	A	0.15
F31	-	87.40	-	12.50	-	-	-	0.10	6*	6	6*	B	0.19
F32	-	74.90	-	25.00	-	-	-	0.10	6	6	6	A	0.17
F33	-	49.90	-	50.00	-	-	-	0.10	6	6	6	A	0.14
F34	-	87.45	-	12.50	-	-	-	0.05	5	5 *	5 *	B1	0.18
F35	-	74.95	-	25.00	-	-	-	0.05	5 *	6	5 *	B1	0.17
F36	-	49.95	-	50.00	-	-	-	0.05	6	6	6	A	0.13
F37	-	-	86.50	12.50	-	-	-	1.00	6	6	6	A	0.23
F38	-	-	74.00	25.00	-	-	-	1.00	6	6	6	A	0.21
F39	-	-	49.00	50.00	-	-	-	1.00	6	6	6	A	0.18
F40	-	-	87.00	12.50	-	-	-	0.50	6	6	6	A	0.20
F41	-	-	74.50	25.00	-	-	-	0.50	6	6	6	A	0.19
F42	-	-	49.50	50.00	-	-	-	0.50	6	6	6	A	0.15
F43	-	-	87.40	12.50	-	-	-	0.10	6	6	6	A	0.19
F44	-	-	74.90	25.00	-	-	-	0.10	6	6	6	A	0.17
F45	-	-	49.90	50.00	-	-	-	0.10	6	6	6	A	0.14
F46	-	-	87.45	12.50	-	-	-	0.05	5 *	5 *	5 *	B2	0.18
F47	-	-	74.95	25.00	-	-	-	0.05	6	6	6	A	0.17
F48	-	-	49.95	50.00	-	-	-	0.05	6	6	6	A	0.13
F49	-	86.50	-	-	12.50	-	-	1.00	6	6	6	A	0.22
F50	-	74.00	-	-	25.00	-	-	1.00	6	6	6	A	0.20
F51	-	49.00	-	-	50.00	-	-	1.00	6	6	6	A	0.17
F52	-	87.00	-	-	12.50	-	-	0.50	6	6	6	A	0.20
F53	-	74.50	-	-	25.00	-	-	0.50	6	6	6	A	0.18
F54	-	49.50	-	-	50.00	-	-	0.50	6	6	6	A	0.14
F55	-	87.40	-	-	12.50	-	-	0.10	6 *	6 *	6 *	B	0.18
F56	-	74.90	-	-	25.00	-	-	0.10	6 *	6	6	B	0.16
F57	-	49.90	-	-	50.00	-	-	0.10	6 *	6	6	B	0.13
F58	-	87.45	-	-	12.50	-	-	0.05	4	4	5 *	B1	0.18
F59	-	74.95	-	-	25.00	-	-	0.05	4	4	5 *	B1	0.16
F60	-	49.95	-	-	50.00	-	-	0.05	4	5	5 *	B1	0.12
F61	-	-	86.50	-	12.50	-	-	1.00	6	6	6	A	0.22
F62	-	-	74.00	-	25.00	-	-	1.00	6	6	6	A	0.20

F63	-	-	49.00	-	50.00	-	-	1.00	6	6	6	A	0.16
F64	-	-	87.00	-	12.50	-	-	0.50	6	6	6	A	0.20
F65	-	-	74.50	-	25.00	-	-	0.50	6	6	6	A	0.18
F66	-	-	49.50	-	50.00	-	-	0.50	6	6	6	A	0.14
F67	-	-	87.40	-	12.50	-	-	0.10	6*	6	6	B	0.18
F68	-	-	74.90	-	25.00	-	-	0.10	6	6	6	A	0.16
F69	-	-	49.90	-	50.00	-	-	0.10	6	6	6	A	0.12
F70	-	-	87.45	-	12.50	-	-	0.05	5*	5*	5*	B2	0.18
F71	-	-	74.95	-	25.00	-	-	0.05	5*	5	5	B1	0.16
F72	-	-	49.95	-	50.00	-	-	0.05	5*	5	5	B1	0.12
F73	-	86.50	-	-	-	12.50	-	1.00	6	6	6	A	0.23
F74	-	74.00	-	-	-	25.00	-	1.00	6	6	6	A	0.21
F75	-	49.00	-	-	-	50.00	-	1.00	6	6	6	A	0.18
F76	-	87.00	-	-	-	12.50	-	0.50	6 *	6	6	B	0.21
F77	-	74.50	-	-	-	25.00	-	0.50	6	6	6	A	0.19
F78	-	49.50	-	-	-	50.00	-	0.50	6	6	6	A	0.16
F79	-	87.40	-	-	-	12.50	-	0.10	5 *	6	4	B1	0.19
F80	-	74.90	-	-	-	25.00	-	0.10	6 *	6	6	B	0.17
F81	-	49.90	-	-	-	50.00	-	0.10	6 *	6 *	6	B	0.14
F82	-	87.45	-	-	-	12.50	-	0.05	4	5 *	6	B1	0.19
F83	-	74.95	-	-	-	25.00	-	0.05	4	5 *	5 *	B1	0.17
F84	-	49.95	-	-	-	50.00	-	0.05	5 *	5 *	5 *	B2	0.14
F85	-	-	86.50	-	-	12.50	-	1.00	6	6	6	A	0.22
F86	-	-	74.00	-	-	25.00	-	1.00	6	6	6	A	0.21
F87	-	-	49.00	-	-	50.00	-	1.00	6	6	6	A	0.18
F88	-	-	87.00	-	-	12.50	-	0.50	6	6	6	A	0.20
F89	-	-	74.50	-	-	25.00	-	0.50	6	6	6	A	0.19
F90	-	-	49.50	-	-	50.00	-	0.50	6	6	6	A	0.16
F91	-	-	87.40	-	-	12.50	-	0.10	6*	6	6	B	0.18
F92	-	-	74.90	-	-	25.00	-	0.10	6	6	6	A	0.17
F93	-	-	49.90	-	-	50.00	-	0.10	6	6	6	A	0.14
F94	-	-	87.45	-	-	12.50	-	0.05	5*	6	6	B1	0.18
F95	-	-	74.95	-	-	25.00	-	0.05	5*	6	6	B1	0.17
F96	-	-	49.95	-	-	50.00	-	0.05	6	6	6	A	0.14

F97	-	-	94.00	-	-	-	5.00	1.00	6	6	6	A	0.23
F98	-	-	89.00	-	-	-	10.00	1.00	6	6	6	A	0.23
F99	-	-	79.00	-	-	-	20.00	1.00	6	6	6	A	0.22
F100	-	-	94.50	-	-	-	5.00	0.50	6	6	6	A	0.21
F101	-	-	89.50	-	-	-	10.00	0.50	6	6	6	A	0.21
F102	-	-	79.50	-	-	-	20.00	0.50	6	6	6	A	0.20
F103	-	-	94.90	-	-	-	5.00	0.10	6	6	6	A	0.19
F104	-	-	89.90	-	-	-	10.00	0.10	6	6	6	A	0.19
F105	-	-	79.90	-	-	-	20.00	0.10	6	6	6	A	0.18
F106	-	-	94.95	-	-	-	5.00	0.05	6	6	6	A	0.19
F107	-	-	89.95	-	-	-	10.00	0.05	6	6	6	A	0.19
F108	-	-	79.95	-	-	-	20.00	0.05	6	6	6	A	0.18
F109	-	94.00	-	-	-	-	5.00	1.00	6	6	6	A	0.24
F110	-	89.00	-	-	-	-	10.00	1.00	6	6	6	A	0.24
F111	-	79.00	-	-	-	-	20.00	1.00	6	6	6	A	0.23
F112	-	94.50	-	-	-	-	5.00	0.50	6	6	6	A	0.22
F113	-	89.50	-	-	-	-	10.00	0.50	6	6	6	A	0.21
F114	-	79.50	-	-	-	-	20.00	0.50	6	6 *	6	B	0.20
F115	-	94.90	-	-	-	-	5.00	0.10	5 *	6	6	B1	0.20
F116	-	89.90	-	-	-	-	10.00	0.10	6	6	6	A	0.20
F117	-	79.90	-	-	-	-	20.00	0.10	6	6	6	A	0.19
F118	-	94.95	-	-	-	-	5.00	0.05	5 *	6	5 *	B1	0.20
F119	-	89.95	-	-	-	-	10.00	0.05	6 *	6	6	B	0.19
F120	-	79.95	-	-	-	-	20.00	0.05	6	5 *	6	B1	0.18
F121	94.00	-	-	-	-	-	5.00	1.00	6	6	6	A	0.24
F122	89.00	-	-	-	-	-	10.00	1.00	6	6	6	A	0.24
F123	79.00	-	-	-	-	-	20.00	1.00	6	6	6	A	0.23
F124	94.50	-	-	-	-	-	5.00	0.50	6 *	6 *	6	B	0.22
F125	89.50	-	-	-	-	-	10.00	0.50	6	6	6	A	0.22
F126	79.50	-	-	-	-	-	20.00	0.50	6	6	6	A	0.21
F127	94.90	-	-	-	-	-	5.00	0.10	5 *	5	6 *	B1	0.20
F128	89.90	-	-	-	-	-	10.00	0.10	6	6	6	A	0.20
F129	79.90	-	-	-	-	-	20.00	0.10	6	6	6	A	0.19
F130	94.95	-	-	-	-	-	5.00	0.05	4	5 *	5 *	B1	0.20

F131	89.95	-	-	-	-	-	10.00	0.05	4	4	5 *	B1	0.20
F132	79.95	-	-	-	-	-	20.00	0.05	6	6	6	A	0.19
F133	86.50	-	-	-	-	12.50	-	1.00	5 *	5 *	4	B1	0.23
F134	74.00	-	-	-	-	25.00	-	1.00	6 *	6 *	6 *	B	0.22
F135	49.00	-	-	-	-	50.00	-	1.00	6 *	4	4	B	0.18
F136	87.00	-	-	-	-	12.50	-	0.50	5 *	5 *	5 *	B2	0.21
F137	74.50	-	-	-	-	25.00	-	0.50	5 *	6 *	6	B1	0.19
F138	49.50	-	-	-	-	50.00	-	0.50	5 *	6 *	6	B1	0.16
F139	87.40	-	-	-	-	12.50	-	0.10	5 *	5 *	5 *	B2	0.19
F140	74.90	-	-	-	-	25.00	-	0.10	4	5 *	5 *	B1	0.18
F141	49.90	-	-	-	-	50.00	-	0.10	5 *	5 *	6 *	B1	0.14
F142	87.45	-	-	-	-	12.50	-	0.05	4	4	4	A	0.19
F143	74.95	-	-	-	-	25.00	-	0.05	4	4	5	B	0.17
F144	49.95	-	-	-	-	50.00	-	0.05	4	5	4	B	0.14
F145	86.50	-	-	-	12.50	-	-	1.00	5 *	6 *	6 *	B1	0.23
F146	74.00	-	-	-	25.00	-	-	1.00	6	6	6	A	0.21
F147	49.00	-	-	-	50.00	-	-	1.00	4	6	4	A	0.17
F148	87.00	-	-	-	12.50	-	-	0.50	5 *	5 *	6 *	B1	0.21
F149	74.50	-	-	-	25.00	-	-	0.50	6	6	6	A	0.19
F150	49.50	-	-	-	50.00	-	-	0.50	6	6	6	A	0.14
F151	87.40	-	-	-	12.50	-	-	0.10	5	5 *	5 *	B1	0.19
F152	74.90	-	-	-	25.00	-	-	0.10	6 *	4	6	B	0.17
F153	49.90	-	-	-	50.00	-	-	0.10	6	6	6	A	0.13
F154	87.45	-	-	-	12.50	-	-	0.05	4	4	4	A	0.19
F155	74.95	-	-	-	25.00	-	-	0.05	4	6	4	A	0.17
F156	49.95	-	-	-	50.00	-	-	0.05	4	5	5 *	B1	0.12
