

Supporting information

Introduction of the first commercial biobased benzoxazines for the manufacturing of fibre reinforced polymers

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Table S1: Burning Times for each p(BDP4740) specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	38	76	114	0	No
2	21	50	71	0	No
3	14	73	87	0	No
4	169	12	181	0	No
5	22	79	101	0	No

Table S2: Burning Times for each p(FB601) specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	55	89	144	0	No
2	8	164	172	0	No
3	85	Destroyed*	-	0	No
4	91	Destroyed*	-	0	No
5	32	69	101	0	No

*Sample broke probably due to residual stress or remaining volatile compounds in the material after the autoclave curing. Since the other specimen were not classifiable according to the norm, the test was not repeated.

Table S3: Burning Times for each p(MT35700) specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	2	28	30	0	No
2	3	20	23	0	No
3	1	19	20	0	No
4	2	24	26	0	No
5	1	18	19	0	No

Table S4: Burning Times for each BDP4740-FRP specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	15	68	83	0	No
2	6	46	52	0	No
3	48	47	95	0	No
4	15	95	110	0	No
5	21	95	116	0	No

Table S5: Burning Times for each FB601-FRP specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	10	40	50	0	No
2	4	39	43	0	No
3	3	37	40	0	No
4	22	39	61	0	No
5	3	34	37	0	No

Table S6: Burning Times for each MT35700-FRP specimen in the UL-94 test.

Sample	t1 [s]	t2 [s]	t1+t2 [s]	t3 [s]	Dripping [Yes No]
1	8	11	19	0	No
2	7	15	22	0	No
3	6	13	19	0	No
4	5	20	25	0	No
5	6	11	17	0	No



Figure S1: UL-PII samples of BDP4740 (a), FB602 (b) and MT35700 (c).

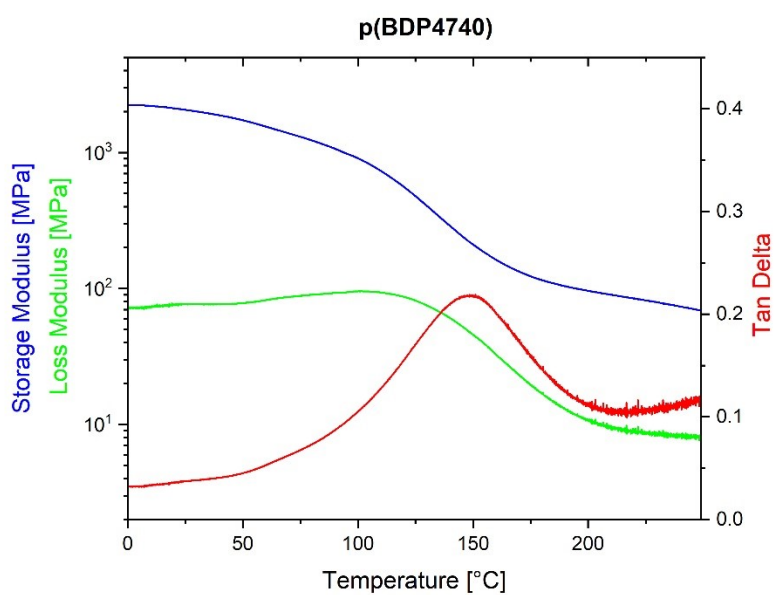
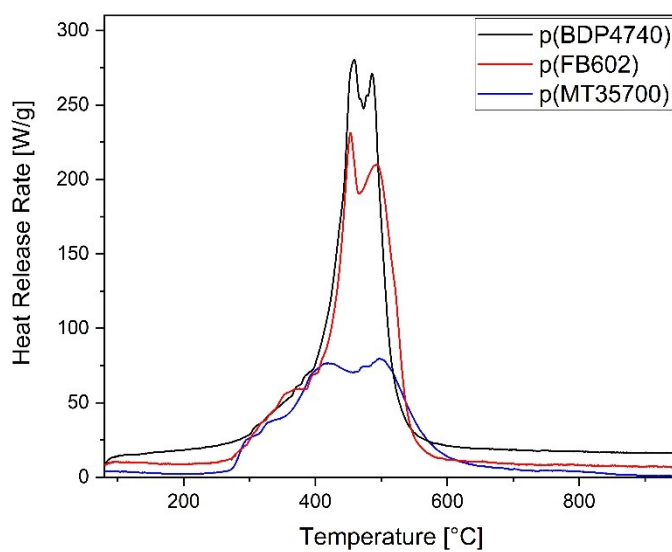


Figure S2: MCC data from the three benzoxazine polymers.

Figure S3: DMA measurement results of p(BDP4740).

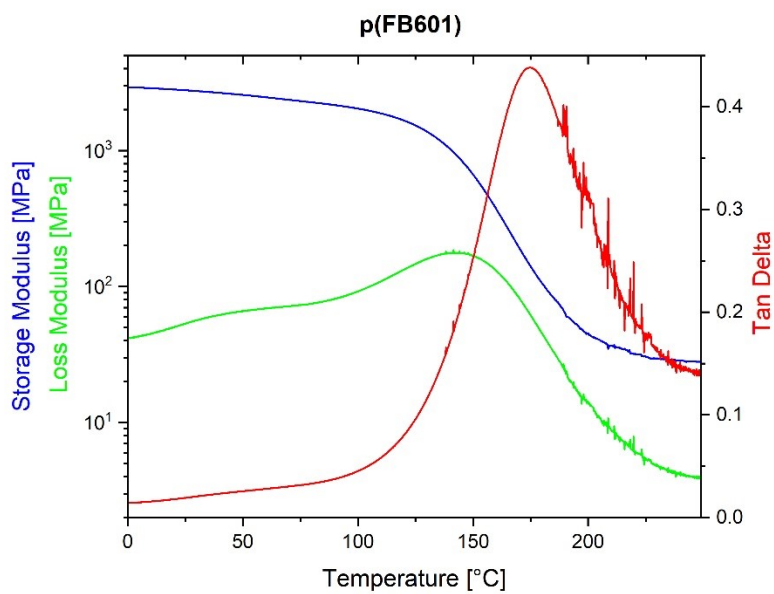


Figure S4: DMA measurement results of p(FB601).

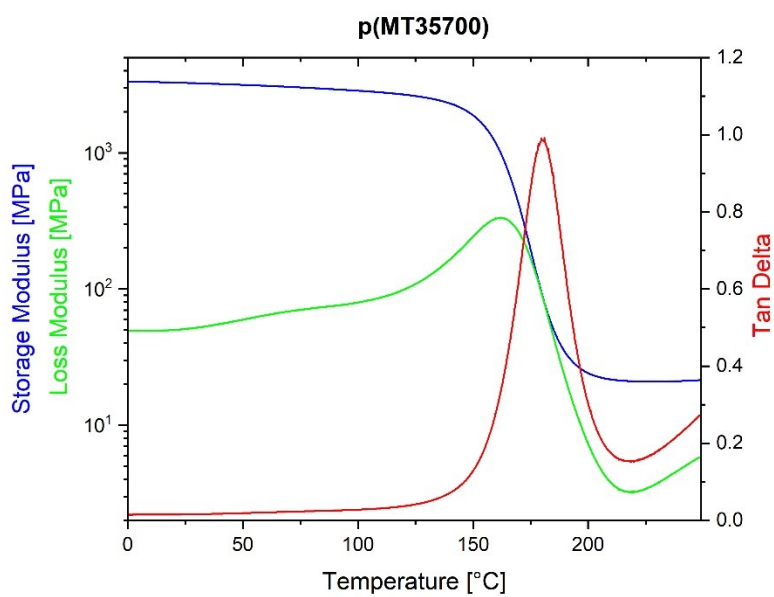


Figure S5: DMA measurement results of p(MT35700).

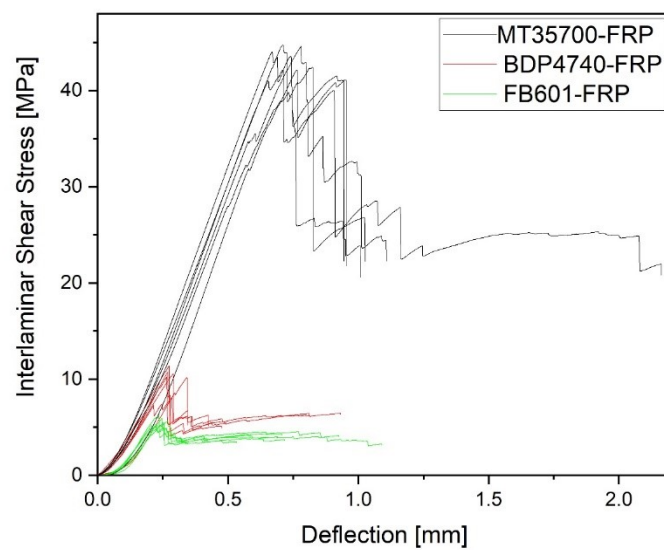


Figure S6: Interlaminar shear stress–deflection curves of the three FRP materials.



Figure S7: Cross section picture of BDP4740-FRP.



Figure S8: Cross-section picture of FB601-FRP.



Figure S9: Cross-section picture of MT35700-FRP.

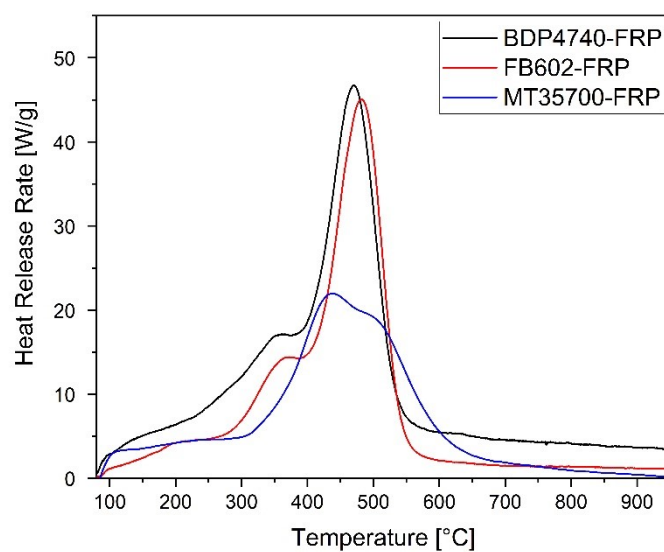


Figure S10: MCC data from the three benzoxazine FRPs.