## Journal Name



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# Successful Radical induced Cationic Frontal Polymerization of epoxy-based monomers by C-C labile compounds.

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Figure S 1 Frontal polymerization setup made from PTFE including mould and light guide holder.

Figure S 1 shows the polymerization setup including the mould and light guide holder made from PTFE. Perpendicular to the pathway of the front there are 6 slots in which thermocouples can be inserted at

<sup>a.</sup> Institute of Applied Synthetic Chemistry, Technische Universität Wien, Getreidemarkt 9/163-MC, 1060 Vienna, Austria different positions (distance 10 mm). The cover glass prevents the contamination of the light guide with the uncured formulation during the curing process. The radiation shield prevents irradiation of all parts of the formulation that are not directly in the pathway of the UV light.





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Figure S 2 Blueprint of the frontal polymerization mould



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Table S 1 Results of the Radical induced Cationic Frontal Polymerization Experiments including front velocity (VF), maximum front temperature (TF, max) and front starting time (tstart).

Resin	Cat. Init.	Therm. Init.	c(Cat. Init.) [mol%]	c(Rad. Init.) [mol%]	Front successfull	T <sub>F,max</sub> [°C]	V <sub>F</sub> [cm/min]	t <sub>start</sub> [s]
BADGE	IOC-8 SbF6	AIBN	1	1	no			
BADGE	IOC-8 SbF6	BPO	1	1	no			
BADGE	IOC-8 SbF6	BPO	1	10	no			
BADGE	IOC-8 SbF6	DCPO	1	1	no			
BADGE	IOC-8 SbF6	DLPO	1	1	no			
BADGE	IOC-8 SbF6	TBC-PDC	2	2	no			
BADGE	IOC-8 SbF6	твро	1	1	no			
BADGE	IOC-8 SbF6	TBPTC	1	1	no			
BADGE	IOC-8 SbF6	TPAP	2	2	no			
BADGE	IOC-8 SbF6	TPE-CN	2	2	no			
BADGE	IOC-8 SbF6	TPED	1	1	yes	173	2.7	38
BADGE	PFPB	TPED	2	2	yes	209	11.4	11
BADGE	IOC-8 SbF6	TPED	2	2	yes	189	8.6	12
BADGE	UVI 6976	TPED	-	2	no			
BADGE	IOC-8 SbF6	TPEH	2	2	no			
BADGE	IOC-8 SbF6	TPE-Si	1	1	yes	150	2.1	39
BADGE	IOC-8 SbF6	TPE-Si	2	2	yes	139	3.5	24
CE	BDPI SbF6	BPO	1	1	yes	156	7.8	24
CE	IOC-8 SbF6	TPED	1	1	yes	176	26.2	31
CHDGE	IOC-8 SbF6	TPED	2	2	yes	140	37.9	23
HDDGE	IOC-8 SbF6	TPED	1	1	yes	181	28.6	12
NPDGE	IOC-8 SbF6	TPED	1	1	yes	169	19.9	10

Please do not adjust margins