1	SUPPORTING INFORMATION			
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4				
5	Lignin: completely green flame retardant in flexible PU			
6	foam			
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Sample ID	Afterflame (s)	Burning drops
Control	14	Yes
35% LS	34	No
164% LS	31	No
237% LS	3	No
321% LS	0	No
142% AL	0	No
167% AL	0	No
276% AL	1	No
90% EHL	54	No
187% EHL	71	No
277% EHL	120	No
387% EHL	1	No

Table S1. Weight increments of the coated PU foams by lignin solution.













36 Figure S2. Digital pictures of control and AL-coated cotton fabrics after vertical burning test



37 Figure S3. Digital pictures of control and LS-coated cotton fabrics after vertical burning test



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39 Figure S4. TGA thermograms of LS-coated cotton fabric.



![](_page_4_Figure_0.jpeg)

Figure S7 Compression stress-strain curves of the control and coated PU foams in different cycles: (A) Control PU foam, (B) 37% LS, (C) 94% LS, (D) 179% LS and (E) 270% LS.