## **Supporting Information**

## Improved Flame Retardant and Ceramifiable Properties of EVA Composites by Combination of Ammonium Polyphosphate and Aluminum Hydroxide

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_	Samples	PHRR (kW m <sup>-2</sup> )	THR (MJ m <sup>-2</sup> )	TTI (s)	Residue (wt%)	Peak SPR (1 ×10 <sup>-2</sup> m <sup>2</sup> s <sup>-1</sup> )
	EVA1	217.4	63.7	64	59.3	2.2
	EVA2	168.1	73.2	66	56.8	1.2
	EVA5	178.9	58.3	73	61.3	2.4

Table S1. CC data of EVA and EVA composites a flux of 50 kW m-2.



Figure S1. HRR (a), THR (b), SPR (c), and ML (d) curves of neat EVA and EVA composites at a flux of 50 kW m<sup>-2</sup>.



**Figure S2.** The digital photographs of the residues at a flux of 50 kW m<sup>-2</sup>. (a), EVA1; (b), EVA2; (c), EVA5;



Figure S3. Surface morphologies of the residues after cone calorimetry. (a,c), EVA5; (b,d), EVA1;