

Table S1: Vertical Burning test (UL94-V) of composites 1 (100% epoxy resin – 0% stabilized fly ash)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	Yes	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	

*Not determined

Table S2: Vertical Burning test (UL94-V) of composites 2 (90% epoxy resin – 10% stabilized fly ash)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	Yes	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	

*Not determined

Table S3: Vertical Burning test (UL94-V) of composites 3 (70% epoxy resin – 30% stabilized fly ash)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	No	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	

*Not determined

Table S4: Vertical Burning test (UL94-V) of composites 4 (50% epoxy resin – 50% stabilized fly ash)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	No	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	

*Not determined

Table S5: Vertical Burning test (UL94-V) of composites 5 (30% epoxy resin – 70% stabilized fly ash)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	<2 s	N.D.*	N.D.	N.D.	N.D.	Yes, after t ₁	NO	–
2	4 s	N.D.	N.D.	N.D.	N.D.	Yes, after t ₁	NO	
3	< 2 s	< 2 s	-	< 4 s	-	NO	NO	

*Not determined

Table S6: Vertical Burning test (UL94-V) of composites 6 (90% epoxy resin – 10% CaCO₃)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	Yes	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	Yes	

*Not determined

Table S7: Vertical Burning test (UL94-V) of composites 7 (70% epoxy resin – 30% CaCO₃)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	No	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	

*Not determined

Table S8: Vertical Burning test (UL94-V) of composites 8 (50% epoxy resin – 50% CaCO₃)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	No	–
2	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
3	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	

*Not determined

Table S9: Vertical Burning test (UL94-V) of composites 9 (30% epoxy resin – 70% CaCO₃)

	Afterflame [t ₁]	Afterflame [t ₂]	Afterglow [t ₃]	t ₁ +t ₂	t ₂ +t ₃	Combustion of sample	Ignition of cotton	UL94 class
1	<2s	N.D.	N.D.	N.D.	N.D.	Yes, after t ₁	No	—
2	N.D.*	N.D.	N.D.	N.D.	N.D.	Yes	No	
3	<2s	N.D.	N.D.	N.D.	N.D.	Yes, after t ₁	No	
4	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	
5	N.D.	N.D.	N.D.	N.D.	N.D.	Yes	No	

*Not determined