

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing

A.B.N 43 006 014 106

1st Floor, 191 Racecourse Road, Flemington, Victoria 3031

P.O Box 240, North Melbourne, Victoria 3051

Phone (03) 9371 2400 Fax (03) 9371 2499

Group Number Assessment

(In accordance with AS 5637.1-2015)

This is to confirm that the product as described below has been tested by AWTA Product Testing .

Testing was performed in accordance with AS/NZS 3837-1998 Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter.

Test Sponsor : Borg Manufacturing Pty Ltd
2 Wella Way
Somersby NSW 2250

Test Number : 19-003250
Issue Date : 16/08/2019
Print Date : 16/08/2019

Sponsor Product Clients Ref : "Custompine Raw 16mm"
Sample of Particleboard
Colour : Natural
End Use : Joinery and Shelving
Nominal Composition : Radiata Pine
Nominal Mass per Unit Area/Density : 650kg/m3
Nominal Thickness : 16mm

Product Group Number Classification : 3

Average Specific Extinction Area : 23.3 m²/kg



Fiona McDonald
Testing Technologist

36805

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Sample of Particleboard
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End Use : Joinery and Shelving
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Nominal Mass per Unit Area/Density : 650kg/m3
Nominal Thickness : 16mm

AS/NZS 3837-1998

Method of Test for Heat and Smoke Release Rates for Materials and Products using an Oxygen Consumption Calorimeter

Date Tested 14/08/2019
Operator AWTA Test Operator 3
Face Tested Face

	Specimen			Mean	
	1	2	3		
Average Heat Release Rate	57.3	58.3	62.6	59.4	kW/m ²
Average Specific extinction area	23.8	21.5	24.8	23.3	m ² /kg

(according to Specification C1.10 of the Building Code of Australia)

Test orientation : Horizontal

	Specimen			Mean	
	1	2	3		
Irradiance	50	50	50	50	kW/m ²
Exhaust flow rate	0.024	0.024	0.024	0.024	m ³ /s
Time to sustained flaming	40	36	35	37	sec
Test duration	3320	3600	3600	3507	sec
Peak heat release after ignition	209.2	216.8	219.9	215.3	kW/m ²
Average heat at 60 s	171.2	186.7	182.2	180.1	kW/m ²

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MANAGING DIRECTOR

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Average heat at 180 s	161.3	167.5	172.9	167.2	kW/m ²
Average heat at 300 s	147.9	153.1	157.1	152.7	kW/m ²
Total heat released	187.9	207.8	223.3	206.3	MJ/m ²
Average effective heat of combustion	16.2	17.3	18.5	17.3	MJ/kg
Initial thickness	16	16	16	16.0	mm
Initial mass	103.3	104.5	107.6	105.1	g
Mass at sustained flaming	102.9	103.9	107.2	104.7	g
Mass remaining	9.0	7.2	9.9	8.7	g
Mass percentage pyrolysed	91.2	93.1	90.8	91.7	%
Mass loss	11.6	12.0	12.1	11.9	kg/m ²
Average rate of mass loss	3.6	3.4	3.4	3.4	g/m ² .s

Additional Observations None

Difficulties Encountered during Testing None

These test results relate only to the behaviour of the product under the conditions of the test, they are not intended to be the sole criterion for assessment of performance under real fire conditions.

The results of these fire tests may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of the fire hazard under all fire conditions.

Tests were conducted with a wire grid placed over the sample during testing. This was done to contain intumescent sample within the sample holder.

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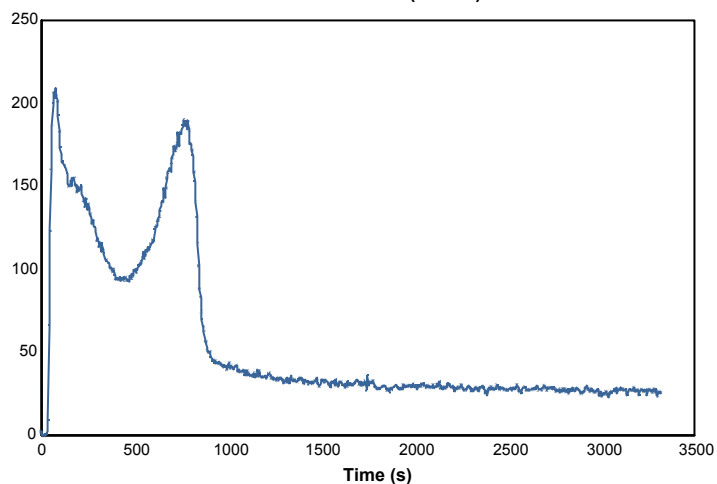
TEST REPORT

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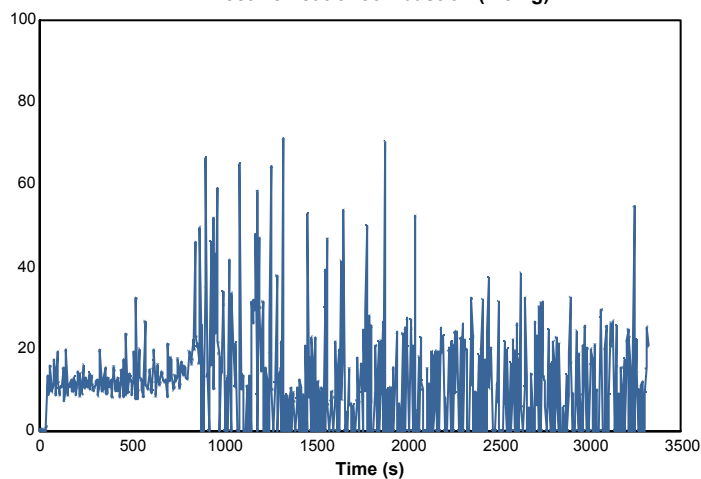
Test Number : 19-003250
Issue Date : 15/08/2019
Print Date : 16/08/2019

Specimen : 1

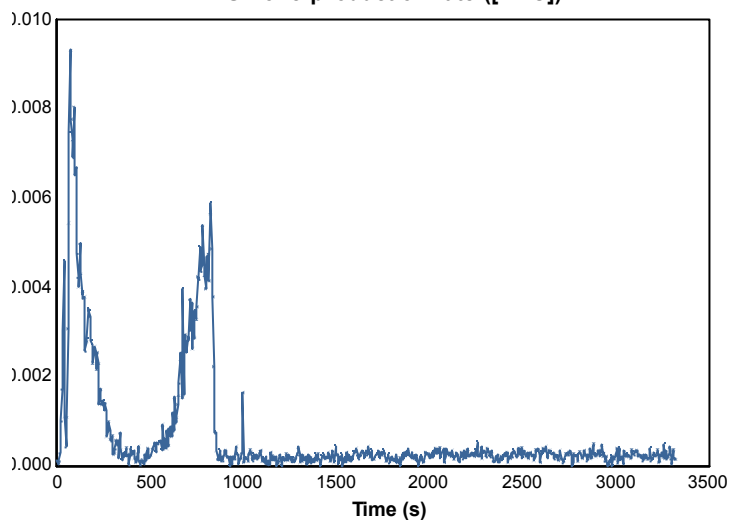
Heat release rate (kW/m²)



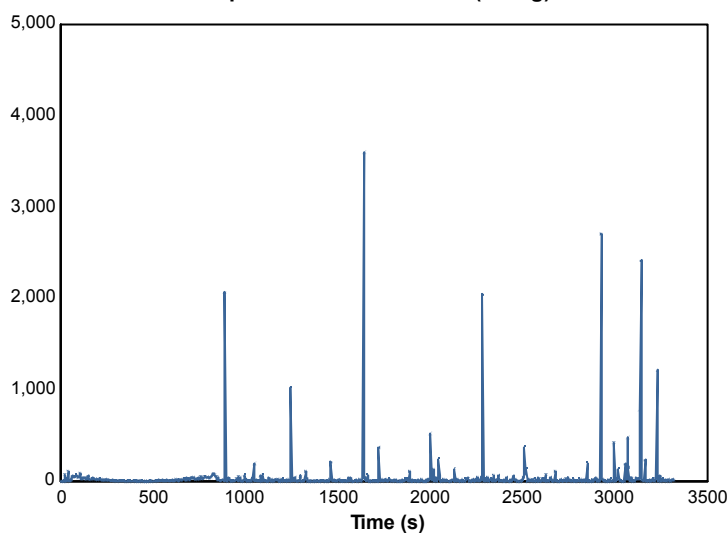
Effective heat of combustion (MJ/kg)



Smoke production rate (l/m²/s)



Specific extinction area (m²/kg)



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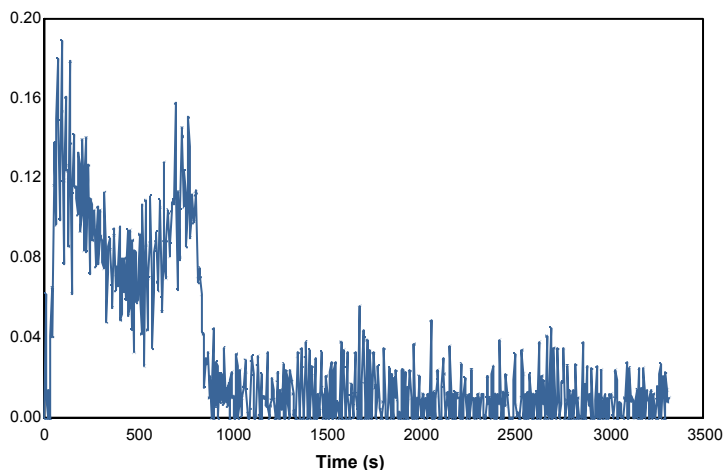
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TEST REPORT

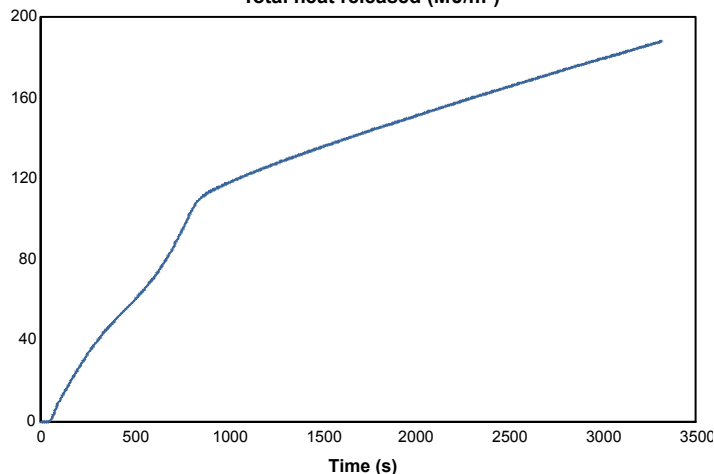
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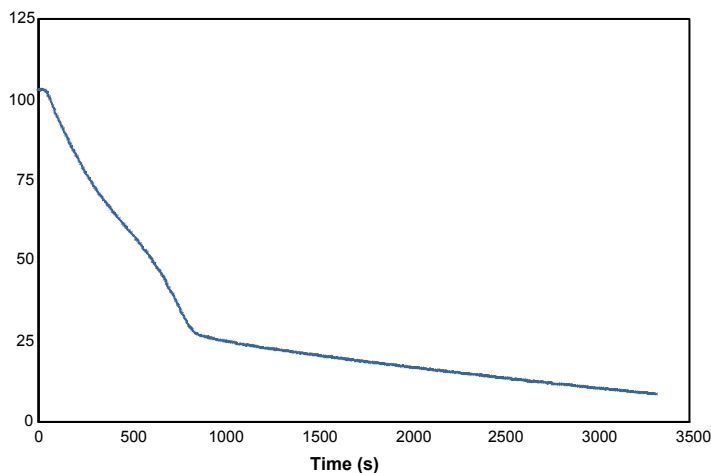
Mass loss rate (g/s)



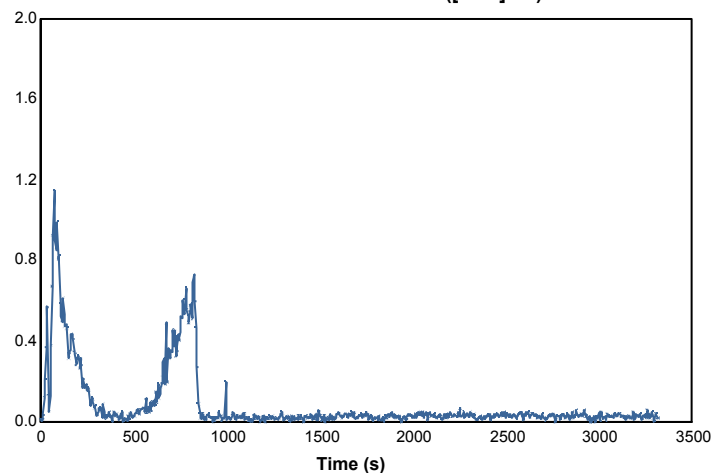
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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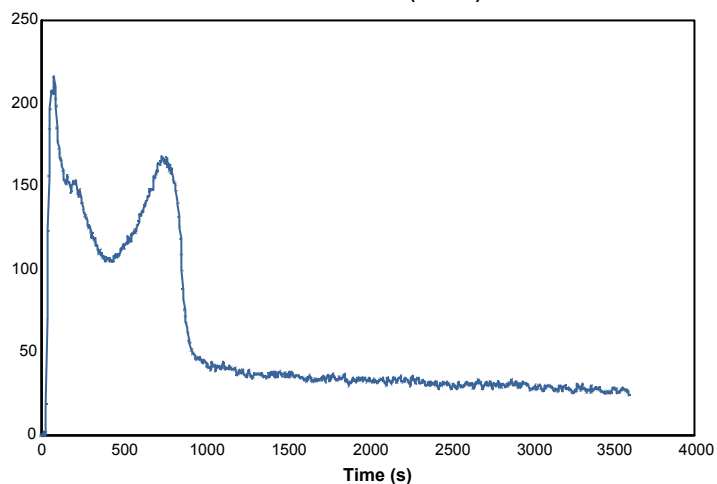
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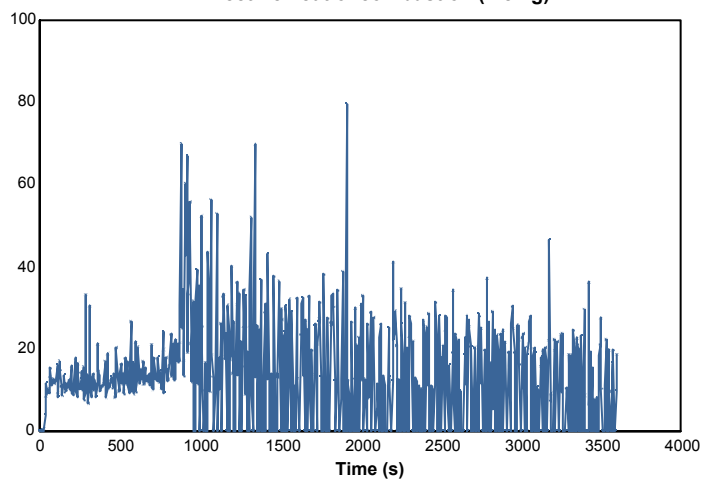
Test Number : 19-003250
Issue Date : 15/08/2019
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Specimen : 2

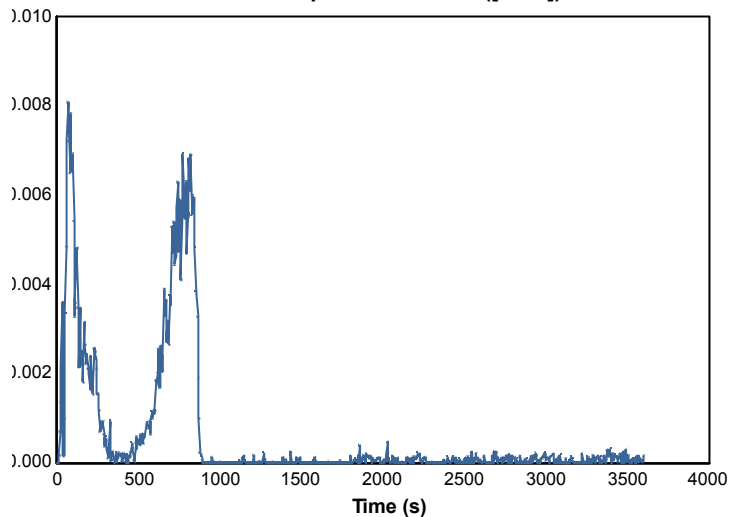
Heat release rate (kW/m²)



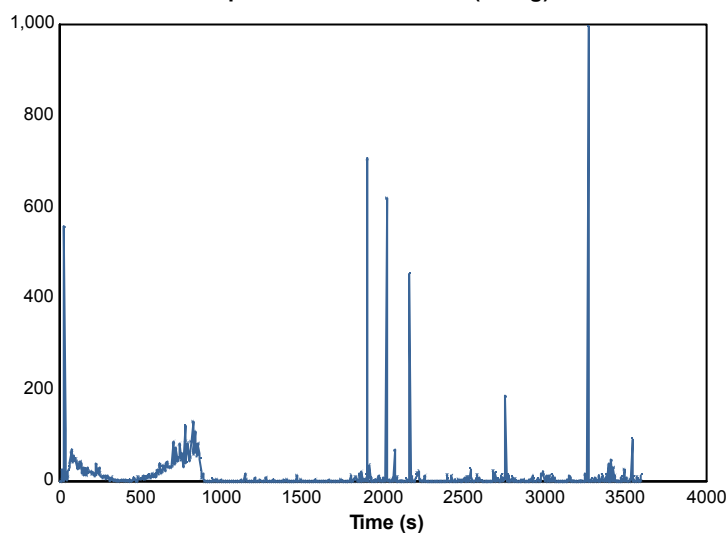
Effective heat of combustion (MJ/kg)



Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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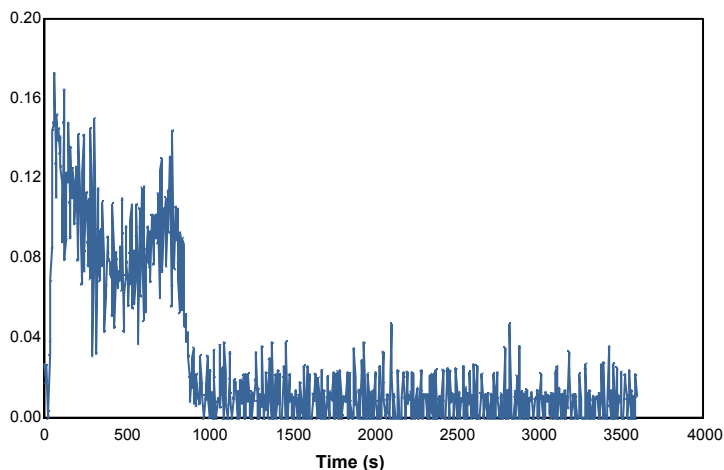
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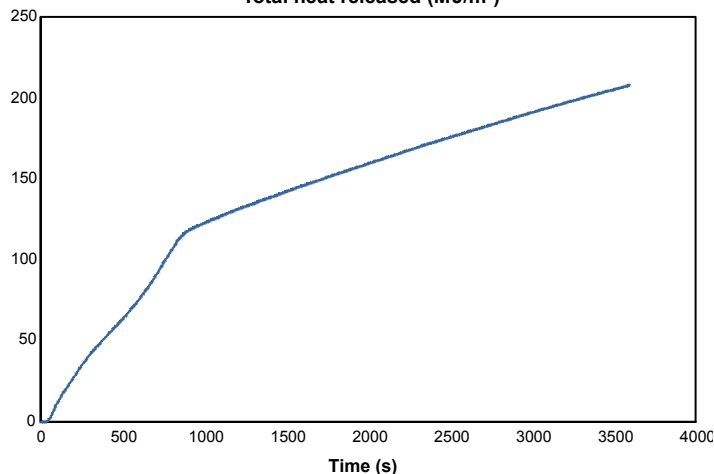
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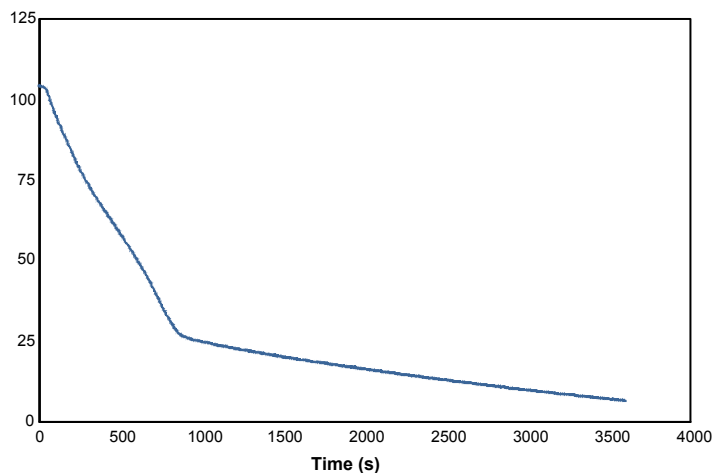
Mass loss rate (g/s)



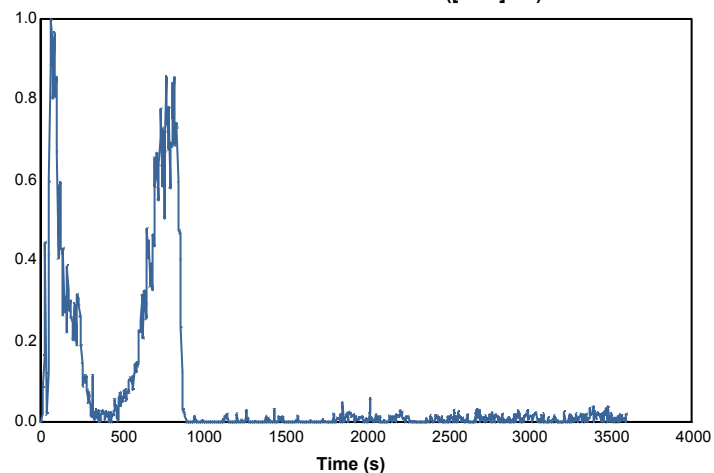
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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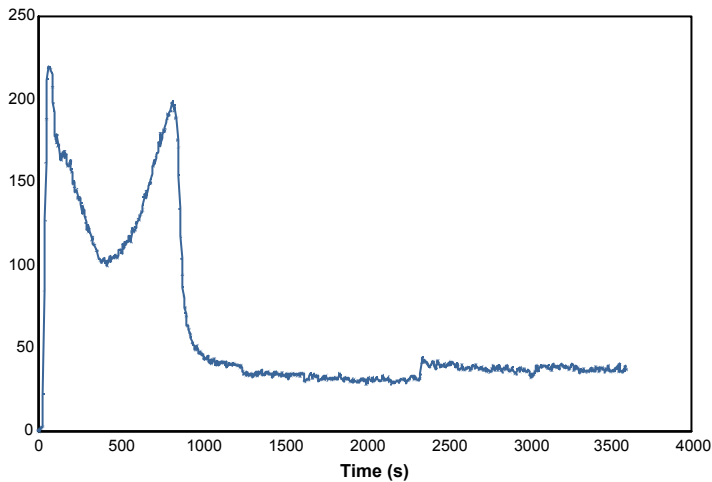
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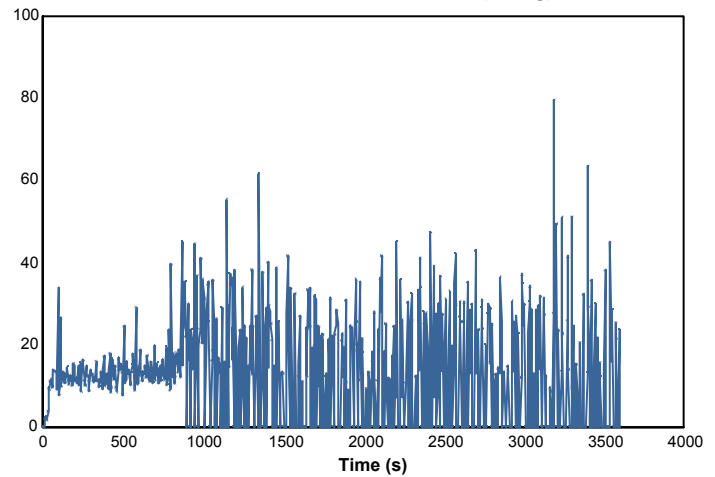
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Specimen : 3

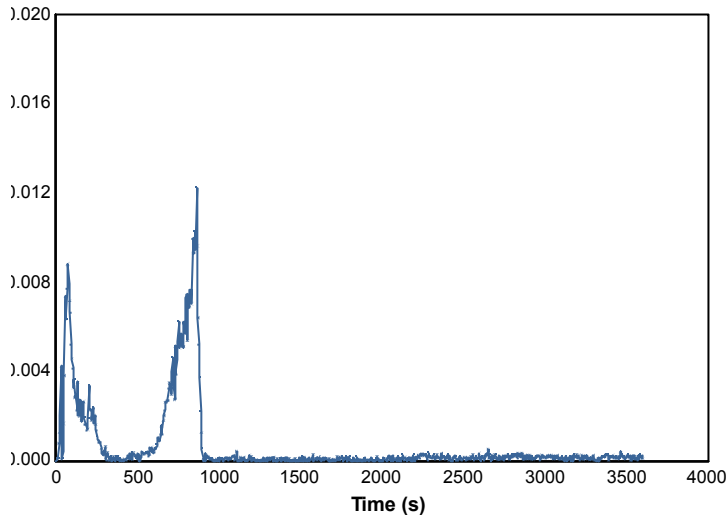
Heat release rate (kW/m²)



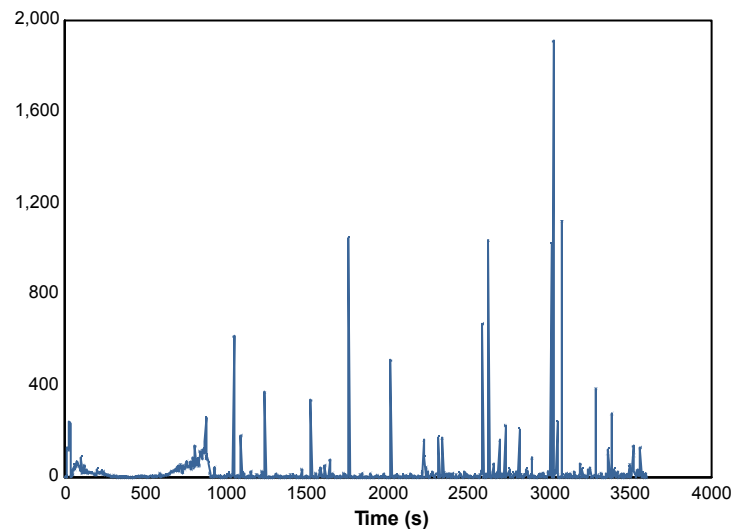
Effective heat of combustion (MJ/kg)



Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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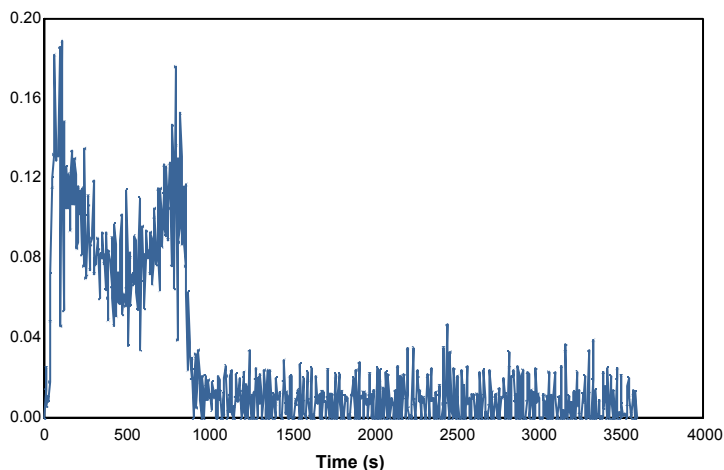
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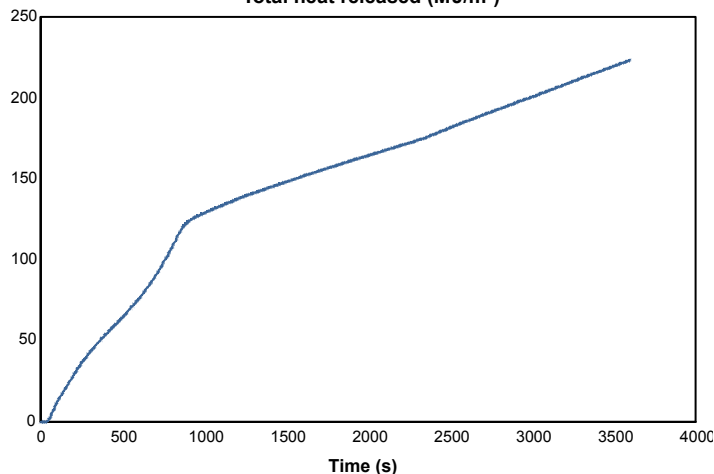
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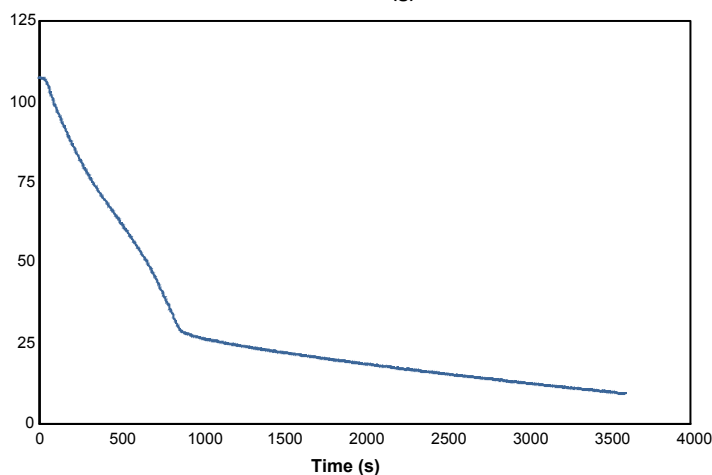
Mass loss rate (g/s)



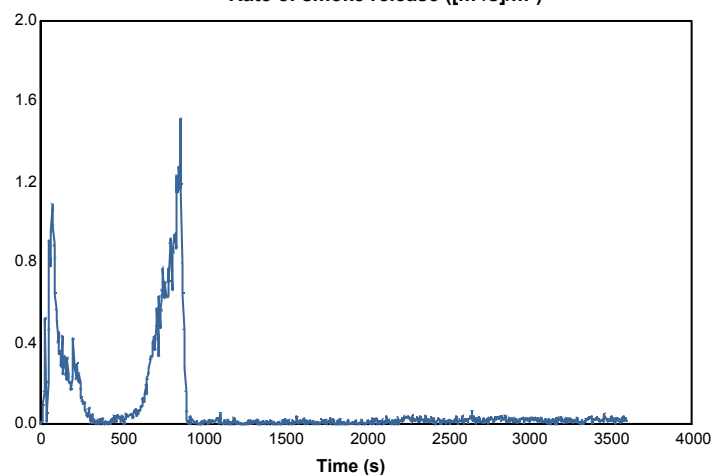
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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