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 16/08/2019

Issue Date

16/08/2019 **Print Date**

Clients Ref: "Custompine Raw 16mm" **Sponsor Product**

> Sample of Particleboard Colour: Natural

Joinery and Shelving End Use : Radiata Pine Nominal Composition:

650kg/m3 Nominal Mass per Unit Area/Density:

Nominal Thickness: 16mm

Product Group Number Classification:

Average Specific Extinction Area: 23.3 m²/kg

Fiona McDonald Testing Technologist

36805

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TEST REPORT

Client: Borg Manufacturing Pty Ltd

2 Wella Way

Somersby NSW 2250

Test Number : 19-003250

Issue Date : 15/08/2019
Print Date : 16/08/2019

Sample Description 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

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

2 3 Mean 1 57.3 58.3 62.6 59.4 kW/m² Average Heat Release Rate 23.8 21.5 24.8 m²/kg Average Specific extinction area 23.3

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

Test orientation: Horizontal

Specimen Mean 1 2 3 50 50 50 50 kW/m² Irradiance m³/s 0.024 0.024 0.024 0.024 Exhaust flow rate Time to sustained flaming 40 36 35 37 sec 3320 Test duration 3600 3600 3507 sec 209.2 216.8 219.9 215.3 kW/m² Peak heat release after ignition Average heat at 60 s 171.2 186.7 182.2 180.1 kW/m²

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- Mechanical Testing

Performance & Approvals Testing

: Accreditation No. 983 : Accreditation No. 985 : Accreditation No. 1356

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MICHAEL A. JACKSON B.Sc.(Hons

AWTA Product Testing

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TEST REPORT

Borg Manufacturing Pty Ltd Client:

2 Wella Way

Somersby NSW 2250

19-003250 Test Number :

15/08/2019 **Issue Date**

16/08/2019 **Print Date**

| Average heat at 180 s | 161.3 | 167.5 | 172.9 | 167.2 | kW/m² |
|---|-------|-------|-------|-------|--------|
| Average heat at 300 s | 147.9 | 153.1 | 157.1 | 152.7 | kW/m² |
| Total heat released | 187.9 | 207.8 | 223.3 | 206.3 | MJ/m² |
| 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/m² |
| Average rate of mass loss | 3.6 | 3.4 | 3.4 | 3.4 | g/m².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 intumescing sample within the sample holder.

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TEST REPORT

Borg Manufacturing Pty Ltd Client:

2 Wella Way

Somersby NSW 2250

Test Number : Issue Date

19-003250 15/08/2019

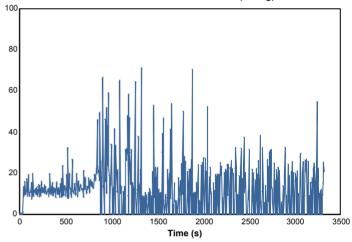
Print Date

16/08/2019

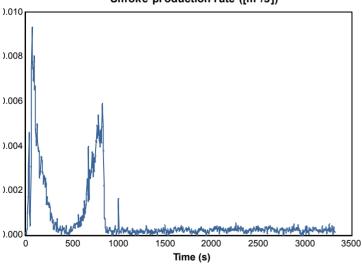
Specimen:

Heat release rate (kW/m²) 250 200 150 100 50 500 1000 1500 2000 2500 3000 3500 Time (s)

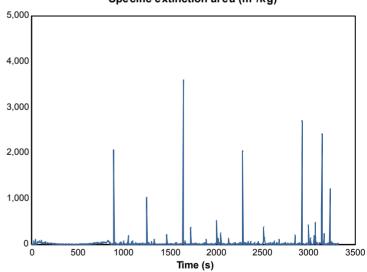
Effective heat of combustion (MJ/kg)







Specific extinction area (m²/kg)



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TEST REPORT

Borg Manufacturing Pty Ltd Client:

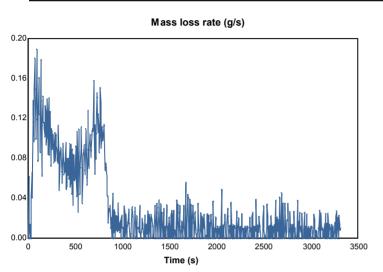
2 Wella Way

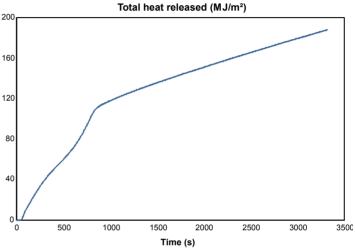
Somersby NSW 2250

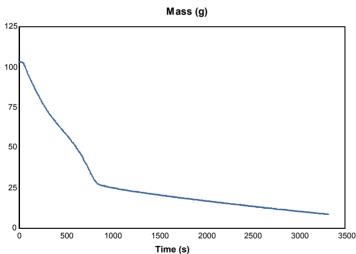
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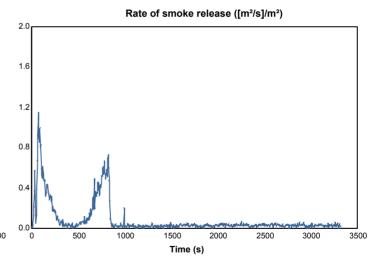
Issue Date 15/08/2019

16/08/2019 **Print Date**









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TEST REPORT

Borg Manufacturing Pty Ltd Client:

2 Wella Way

Somersby NSW 2250

19-003250 Test Number :

Issue Date

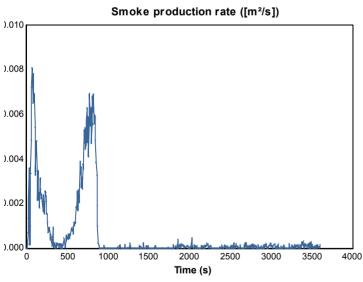
16/08/2019 **Print Date**

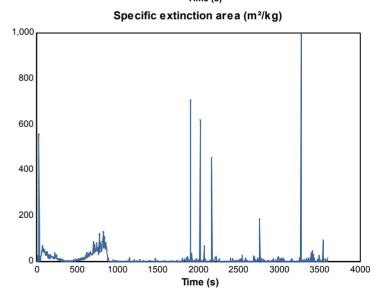
15/08/2019

2 Specimen:

Heat release rate (kW/m²) 250 200 150 100 50 500 1000 1500 2000 2500 3000 3500 4000 Time (s)

Effective heat of combustion (MJ/kg) 100 60 40 4000 Time (s)





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Borg Manufacturing Pty Ltd Client:

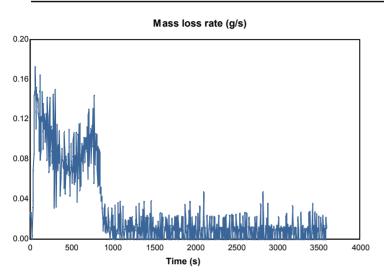
2 Wella Way

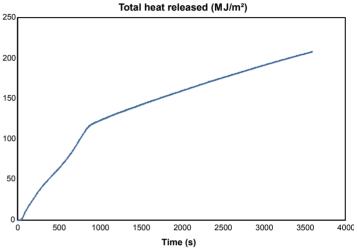
Somersby NSW 2250

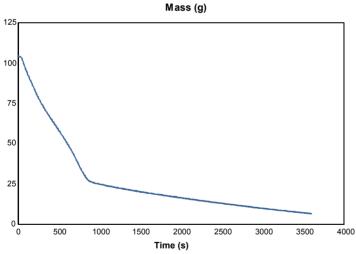
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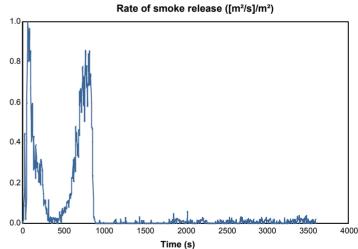
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TEST REPORT

Borg Manufacturing Pty Ltd Client:

2 Wella Way

Somersby NSW 2250

19-003250 Test Number :

Issue Date

16/08/2019 **Print Date**

15/08/2019

3 Specimen:

250

200

150

100

50

500

1000

1500

Heat release rate (kW/m²)

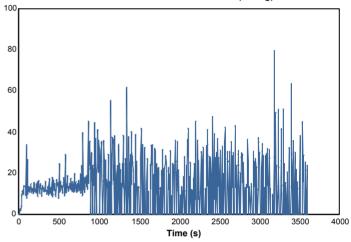
2500

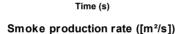
3000

3500

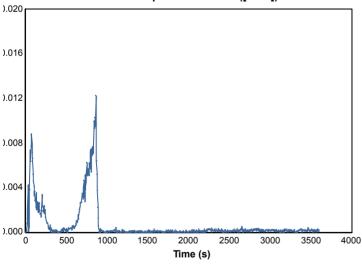
4000

Effective heat of combustion (MJ/kg)

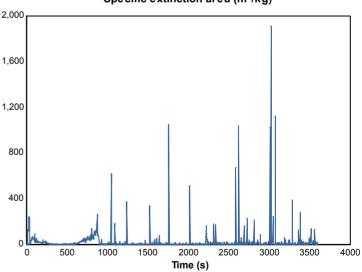




2000



Specific extinction area (m²/kg)



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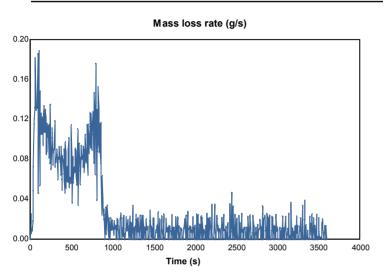
2 Wella Way

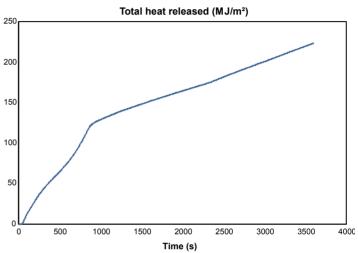
Somersby NSW 2250

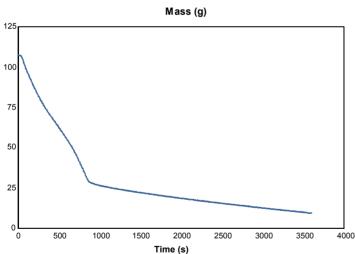
Test Number : 19-003250

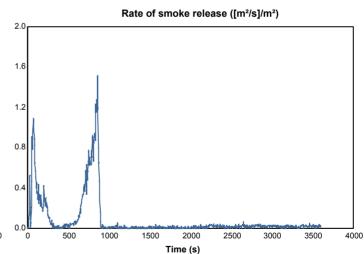
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