

# 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

## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

**Sample Description** Clients Ref : "HuangShan Huasu Composite Decking"  
Composite Decking  
Colour : Various  
End Use : Outdoor Decking  
Nominal Composition : Wood/Polyethylene/Additives  
Nominal Thickness : 25mm

**AS/NZS 3837-1998** Method of Test for Heat and Smoke Release Rates for Materials and Products using an Oxygen Consumption Calorimeter

Date Tested 29/10/2020  
Face Tested Various

	Specimen				Mean	
	1	2	3	fti		
Average Heat Release Rate	fti	fti	fti	fti	kW/m <sup>2</sup>	
Average Specific extinction area	164.6	248.5	494.5	302.5	m <sup>2</sup> /kg	

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

Test orientation : Horizontal

	Specimen				Mean	
	1	2	3	fti		
Irradiance	25	25	25	25	kW/m <sup>2</sup>	
Exhaust flow rate	0.024	0.024	0.024	0.024	m <sup>3</sup> /s	
Time to sustained flaming	fti	fti	fti	fti	sec	
Test duration	600	600	600	600	sec	
Initial thickness	25	25	25	25.0	mm	
Initial mass	311	321.6	326.9	319.8	g	
Mass remaining	309.1	320.5	326.0	318.6	g	
Mass percentage pyrolysed	0.6	0.3	0.3	0.4	%	

140088

47677

Page 1 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

Mass loss	228.9	136.7	109.6	158.4	kg/m <sup>2</sup>
Average rate of mass loss	0.4	0.2	0.2	0.3	g/m <sup>2</sup> .s
Additional Observations	None				
Difficulties Encountered during Testing	None				

fti = failed to ignite

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

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.

Specimens tested failed to ignite within 10 minutes and testing was ceased as  
per section 2.5.2(i).

Tests were conducted with an Irradiance of 25kW/m<sup>2</sup>. All calculations are  
based on ignition +10 minutes as per AS 3959 Appendix F.

Compliance to AS 3959-2018 Appendix F2

Requirement: Peak heat release rate 100kW/m<sup>2</sup> maximum.

Average heat release rate for 10 minutes following ignition shall not be greater  
than 60kW/m<sup>2</sup>

Complies

Compliance to AS 3959- 2018, Clause 7.7.2.4 BAL 29- Decking, stair treads and the trafficable  
surfaces of ramps and landings

Complies

140088

47677

Page 2 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

APPROVED SIGNATORY



MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

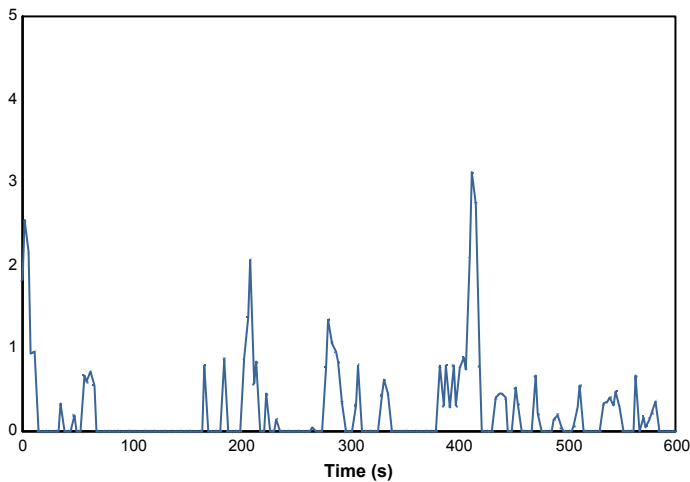
## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

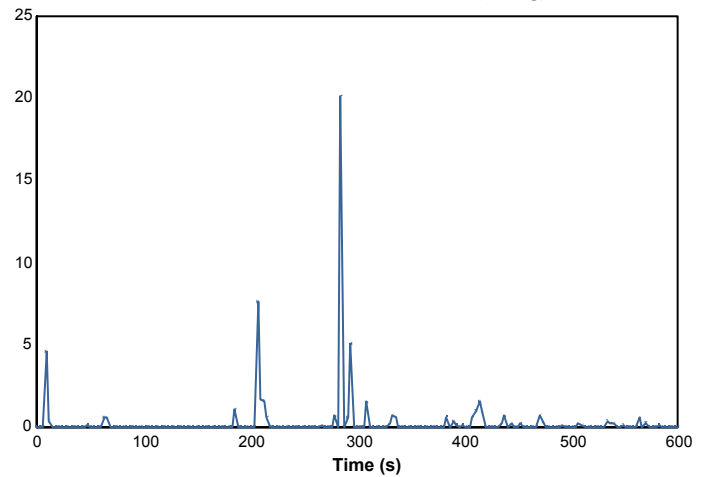
**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

**Specimen :** 1

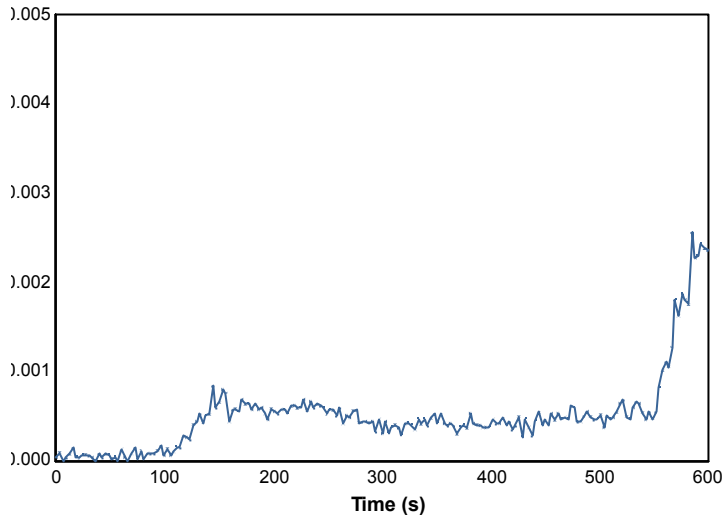
Heat release rate (kW/m<sup>2</sup>)



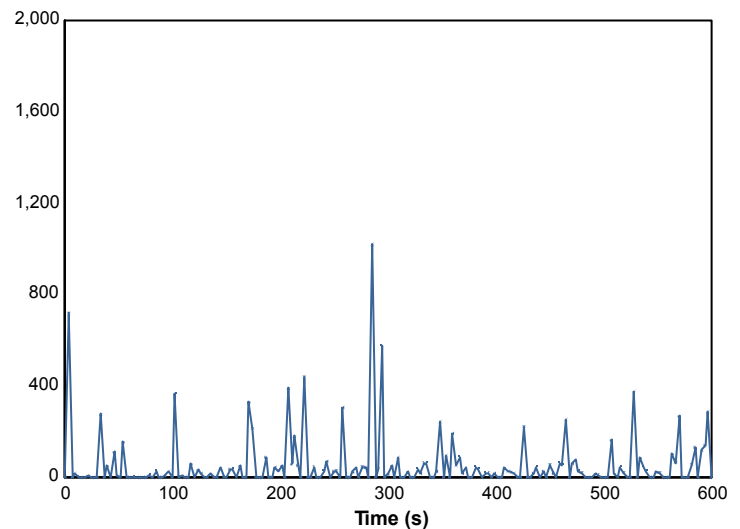
Effective heat of combustion (MJ/kg)



Smoke production rate (l/m<sup>2</sup>/s)



Specific extinction area (m<sup>2</sup>/kg)



140088

47677

Page 3 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.



APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

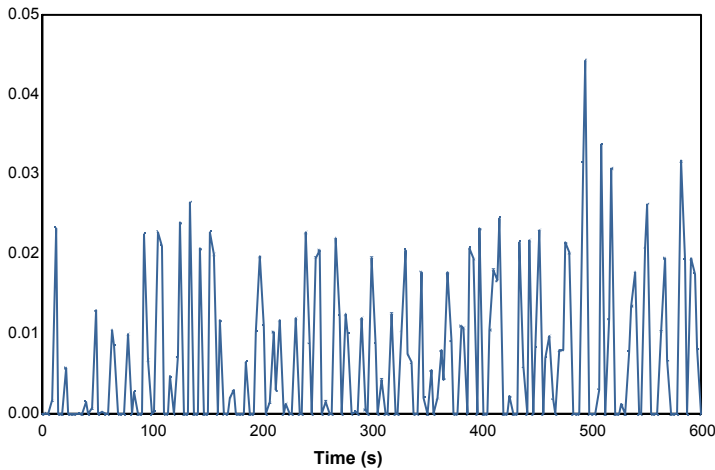
Phone (03) 9371 2400

## TEST REPORT

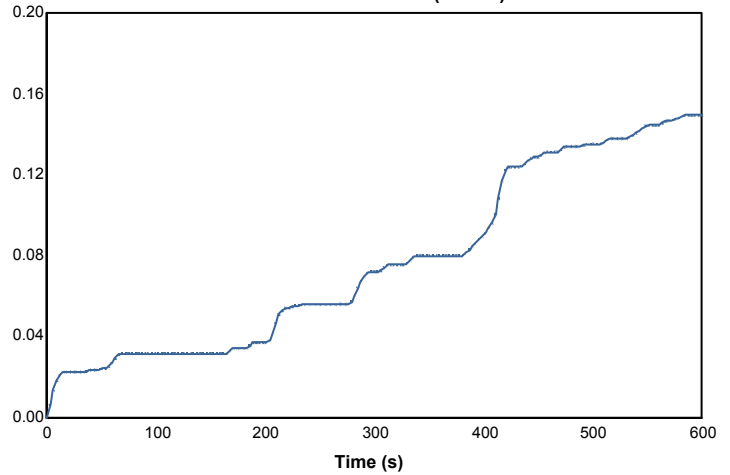
**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

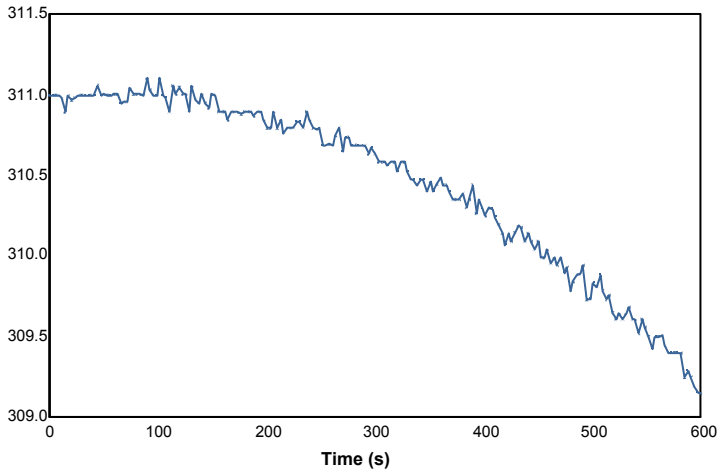
Mass loss rate (g/s)



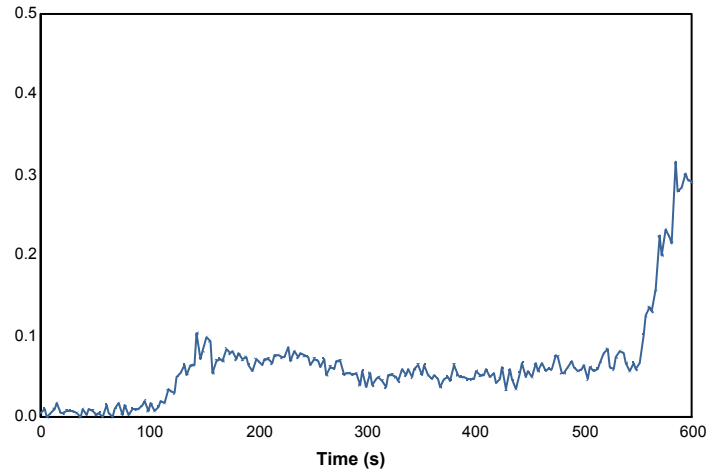
Total heat released (MJ/m<sup>2</sup>)



Mass (g)



Rate of smoke release ([m<sup>2</sup>/s)/m<sup>2</sup>)



140088

47677

Page 4 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.



APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

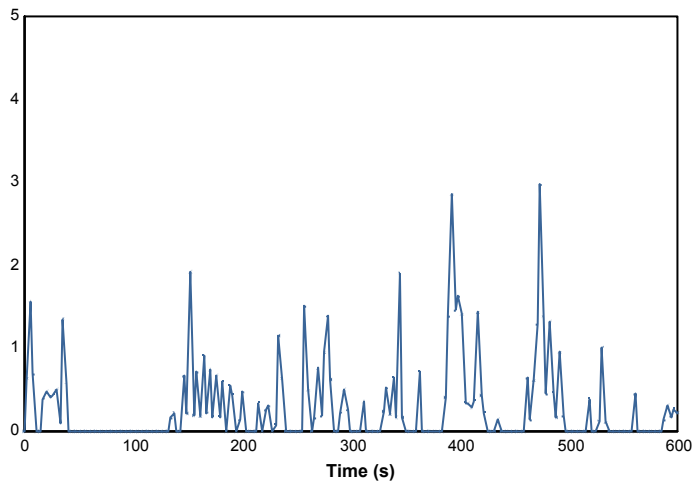
## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

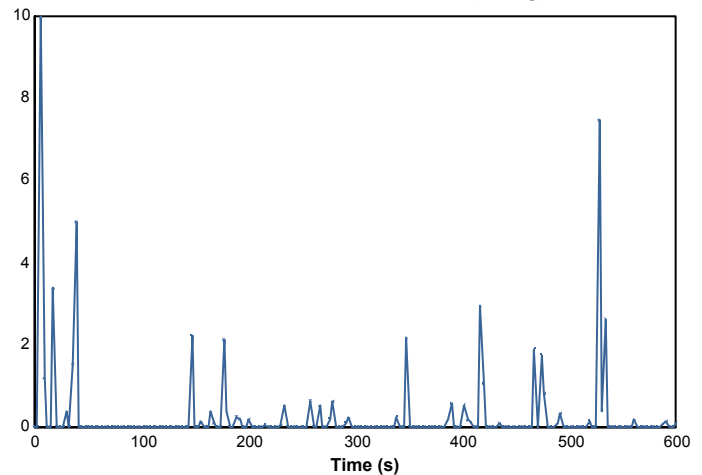
**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

**Specimen :** 2

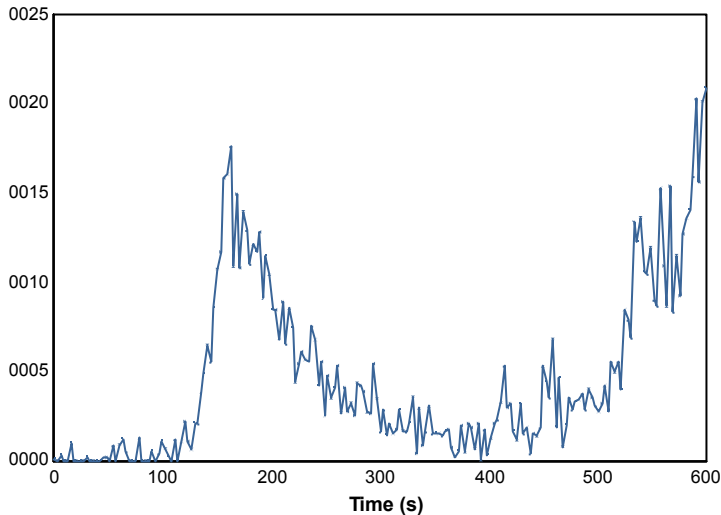
Heat release rate (kW/m<sup>2</sup>)



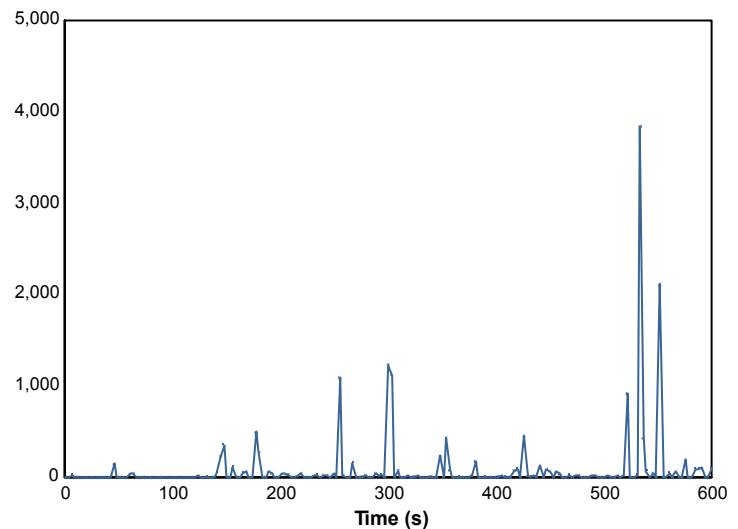
Effective heat of combustion (MJ/kg)



Smoke production rate (l/m<sup>2</sup>/s)



Specific extinction area (m<sup>2</sup>/kg)



140088

47677

Page 5 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.



APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

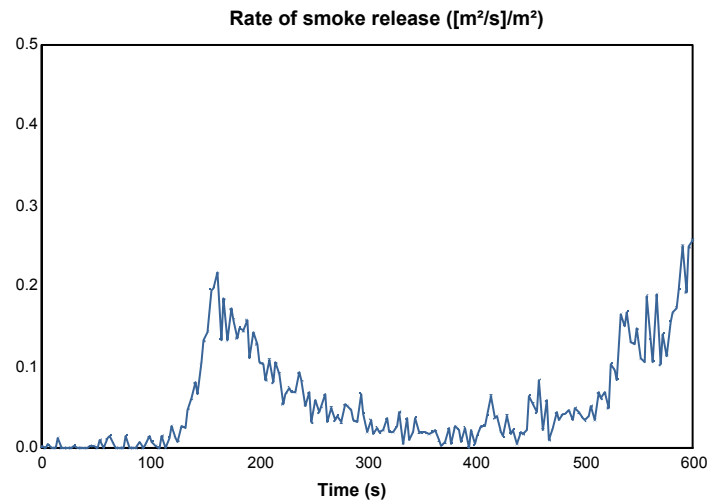
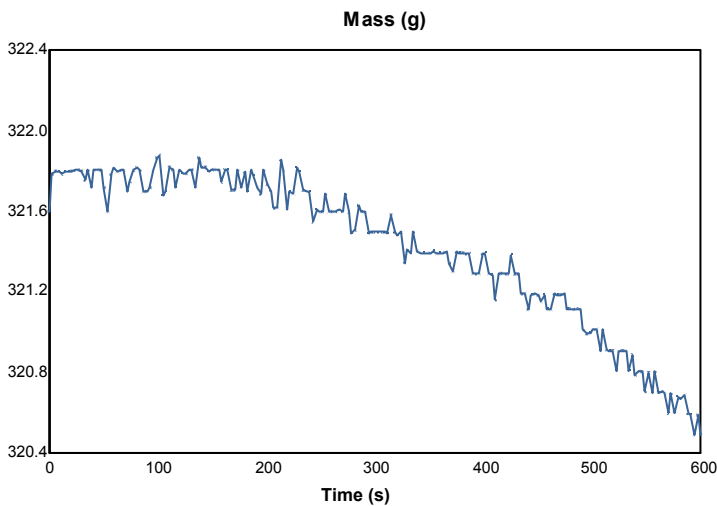
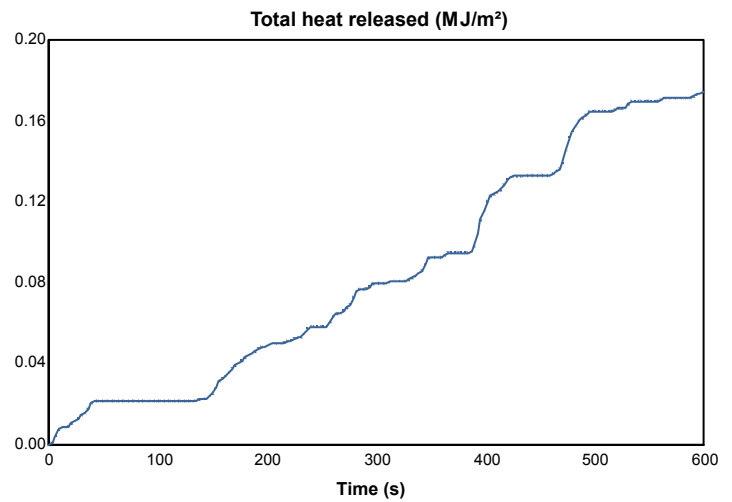
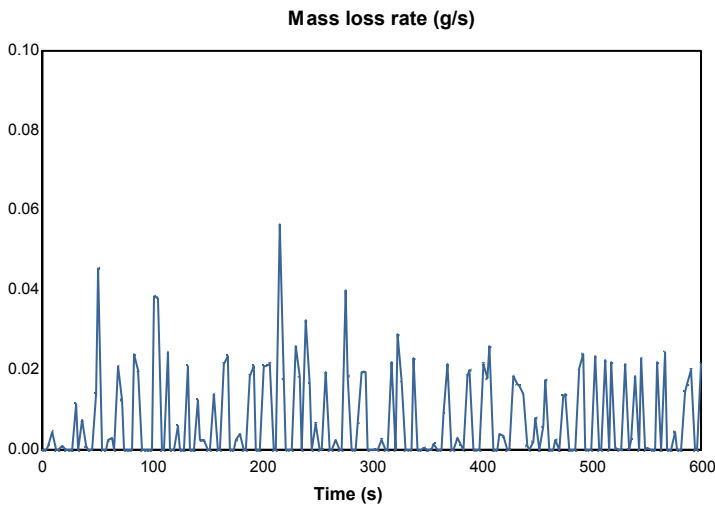
P.O Box 240, North Melbourne, Victoria 3051

Phone (03) 9371 2400

## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020



140088

47677

Page 6 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR

# 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

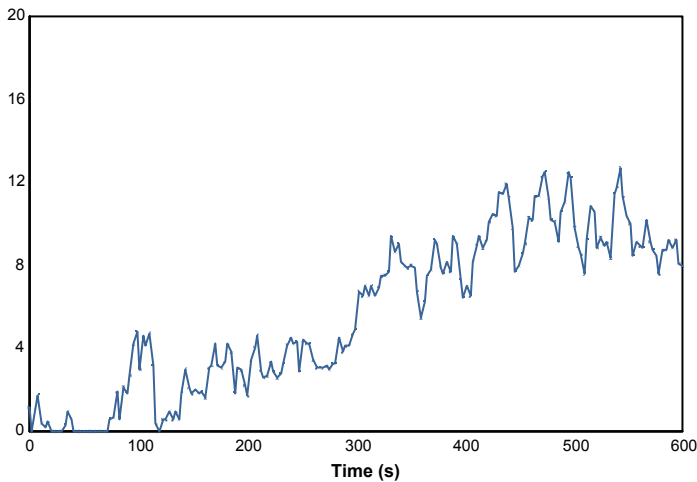
## TEST REPORT

**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

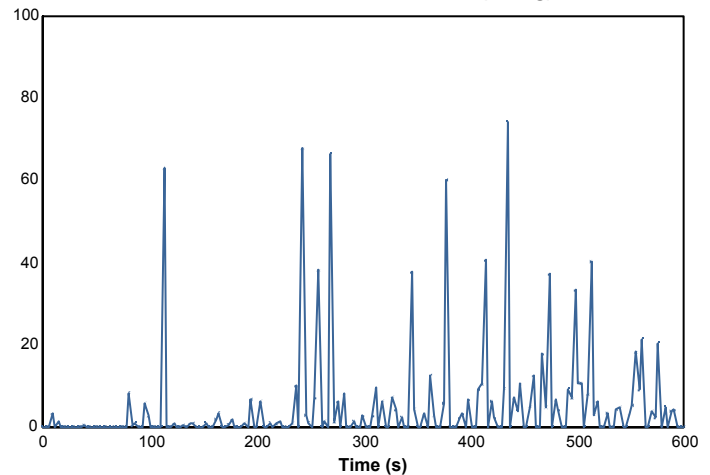
**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

**Specimen :** 3

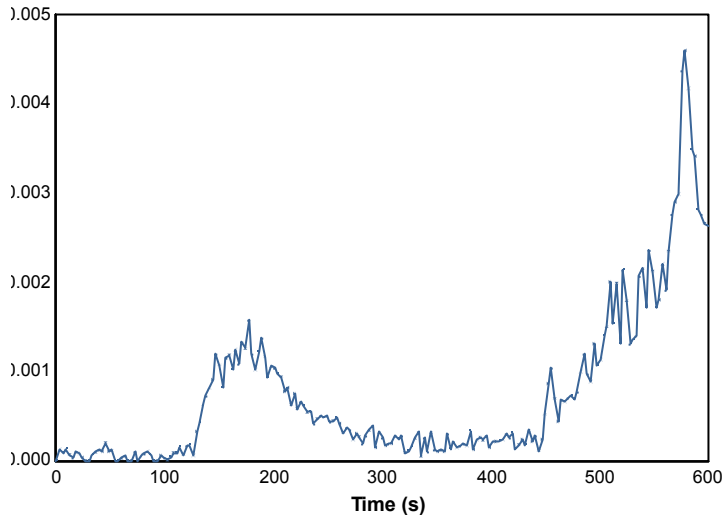
Heat release rate (kW/m<sup>2</sup>)



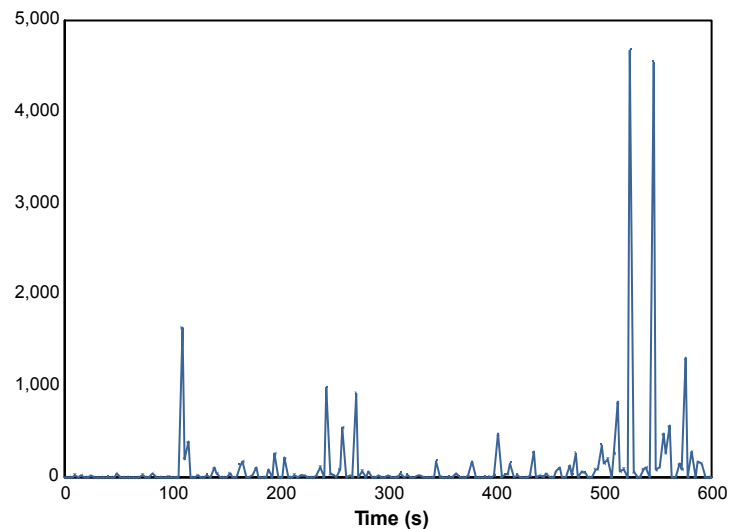
Effective heat of combustion (MJ/kg)



Smoke production rate (l/m<sup>2</sup>/s)



Specific extinction area (m<sup>2</sup>/kg)



140088

47677

Page 7 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.



# 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

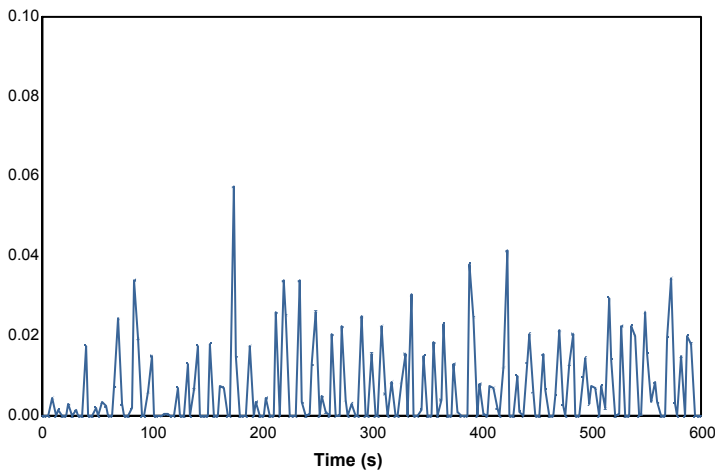
Phone (03) 9371 2400

## TEST REPORT

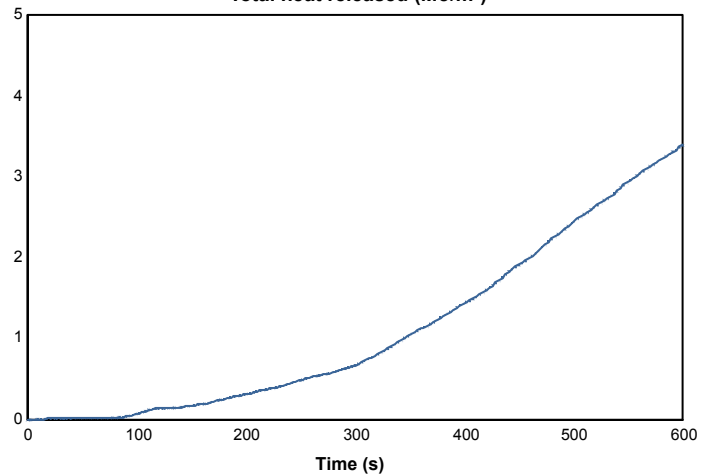
**Client :** Huangshan Huasu New Material Science  
& Technology Co.,Ltd  
Chenhbei Industrial Zone,Huizhou District,  
Huanhshan City,Anhui Province 245000 China

**Test Number :** 20-005673  
**Issue Date :** 05/11/2020  
**Print Date :** 5/11/2020

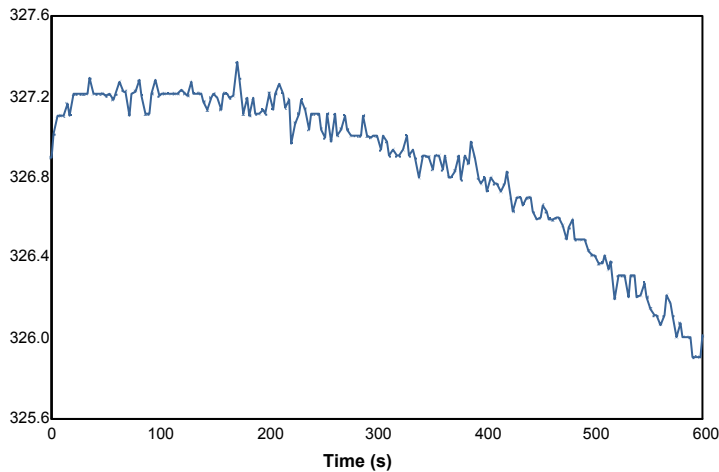
Mass loss rate (g/s)



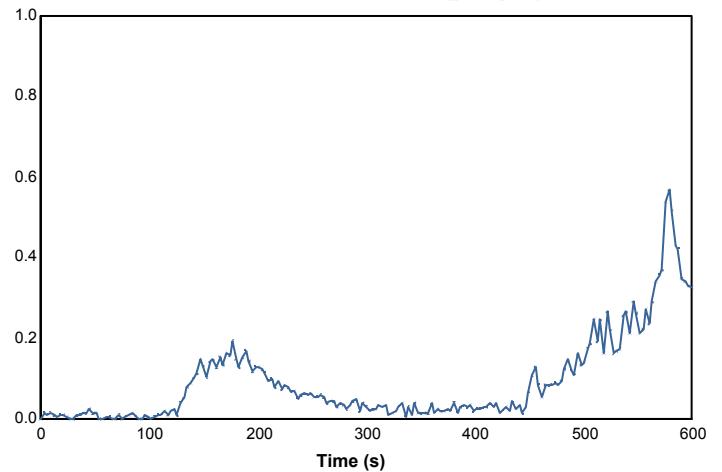
Total heat released (MJ/m<sup>2</sup>)



Mass (g)



Rate of smoke release ([m<sup>2</sup>/s]/m<sup>2</sup>)



140088

47677

Page 8 of 8

© Australian Wool Testing Authority Ltd  
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.



APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)  
MANAGING DIRECTOR