

**Test Report No. 7191169901-MEC17/B3-YWA**  
dated 03 Oct 2017

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**SUBJECT:**

Flammability test on "GRM Biowood Profile with fire retardant" material submitted by PT. Latrade Batam Indonesia on 25 Aug 2017.

**TESTED FOR:**

PT. Latrade Batam Indonesia  
Latrade Industrial Park, Blk E3  
Jalan Sei Binti, Tanjung Uncang  
29422 Batam  
Indonesia

**DATE OF TEST:**

26 Sep 2017

**PURPOSE OF TEST:**

Based on ASTM D 635-14 - Standard Test Method for "Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position."

The test was conducted at TÜV SÜD PSB's fire test laboratory located at No. 10 Tuas Avenue 10, Singapore 639134.



LA-2007-0380-A LA-2007-0384-G  
LA-2007-0381-F LA-2007-0385-E  
LA-2007-0382-B LA-2007-0386-C  
LA-2007-0383-G LA-2010-0464-D

The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council. Inspections/Calibrations/Tests marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our inspection body/laboratory.

Laboratory:  
TÜV SÜD PSB Pte. Ltd.  
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Regional Head Office:  
TÜV SÜD Asia Pacific Pte. Ltd.  
1 Science Park Drive, #02-01  
Singapore 118221  
TÜV®

**DESCRIPTION OF SAMPLES:**

20 pieces of specimen, said to be “GRM Biowood Profile with fire retardant” (16mm thick) material comprising of Wood Plastic Composite, each of nominal test size of 125mm x 13mm were received. The bulk density of the sample was found to be approximately 1220kg/m<sup>3</sup>.

**RESULTS:**

Description	Unit	Result
Flammability test	-	Horizontal burning test
1. No of specimens.	-	10
2. Specimen thickness	mm	16
3. Flame front passed 25mm mark	sec	0
4. Flame front passed 100mm mark	sec	0
5. Burnt length	mm	N.A
6. Average elapsed flaming time between 25mm and 100mm mark	sec	N.A
7. Average burning rate	mm/min	N.A
8. Observation		No flaming was observed after removal of the burner.
Classification requirements	<p>A material classed HB shall:</p> <ul style="list-style-type: none"> <li>a) There is no visible signs of combustion after the ignition source is removed, or</li> <li>b) The flame front does not pass the 25mm reference mark, or</li> <li>c) The flame front passes the 25mm reference mark but does not reach the 100mm reference mark, or</li> <li>d) The flame front reaches the 100mm reference mark and the linear burning rate does not exceed 40 mm/min for specimens having a thickness between 3 and 13mm or 75mm mm/min for specimens having a thickness less than 3mm.</li> </ul>	

**CONCLUSION:**

The results of the sample tested meet the requirements of ASTM D 635-14 for classification as HB.

  
Ong Kian Huat  
Senior Associate Engineer

  
Chan Lung Toa  
Product Manager  
Fire Property  
Mechanical

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July 2011

