

Test Report No. 7191190037-MEC18/2-JV
dated 19 July 2018



PSB Singapore

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SUBJECT:

Determination of the reaction to fire tests for building products excluding floorings, when exposed to the thermal attack by a single burning item on 'Greenlam' High Pressure Laminate Panel (12mm thick, density 17.34kg/m²) submitted by Greenlam Asia Pacific Pte Ltd on 02 Jul 2018.

TESTED FOR:

Greenlam Asia Pacific Pte Ltd
11 Sungei Kadut Crescent
Singapore 728683

DATE OF TEST:

19 Jul 2018

PURPOSE OF TEST:

To determine the ignitability of the product when subjected to direct impingement of flame according to EN ISO 11925-2 : 2010 Part 2: Single-flame source test (BS EN ISO 11925-2:2010).

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



LA-2007-0380-A
LA-2007-0381-F
LA-2007-0382-B
LA-2007-0383-G

LA-2007-0384-G
LA-2007-0385-E
LA-2007-0386-C
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:
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Co. Reg : 199002667R

Regional Head Office:
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1 Science Park Drive, #02-01
Singapore 118221
TÜV®

DESCRIPTION OF SPECIMEN:

Twenty pieces of specimen, said to be 'Greenlam' High Pressure Laminate Panel (12mm thick, density 17.34kg/m²), each of nominal size 250mm x 90mm x 50mm thick were received. The nominal overall density and thickness of the specimen were found to be 1429 kg/m³ and 12.8mm respectively.

Details of the product, as provided by the sponsor of test, are as follows:

Product manufactured / supplied by :	
Company Address	Greenlam Industries Limited Dhami, Industrial Area Behror, Rajasthan 301701 India
Brand & Model reference	Greenlam
Generic product name	Greenlam
Material composition	Paper
Nominal mass per unit area	17.34 kg/m ²
Nominal thickness (mm)	12mm
Fire retardant	-

Photograph of specimen:



Utk



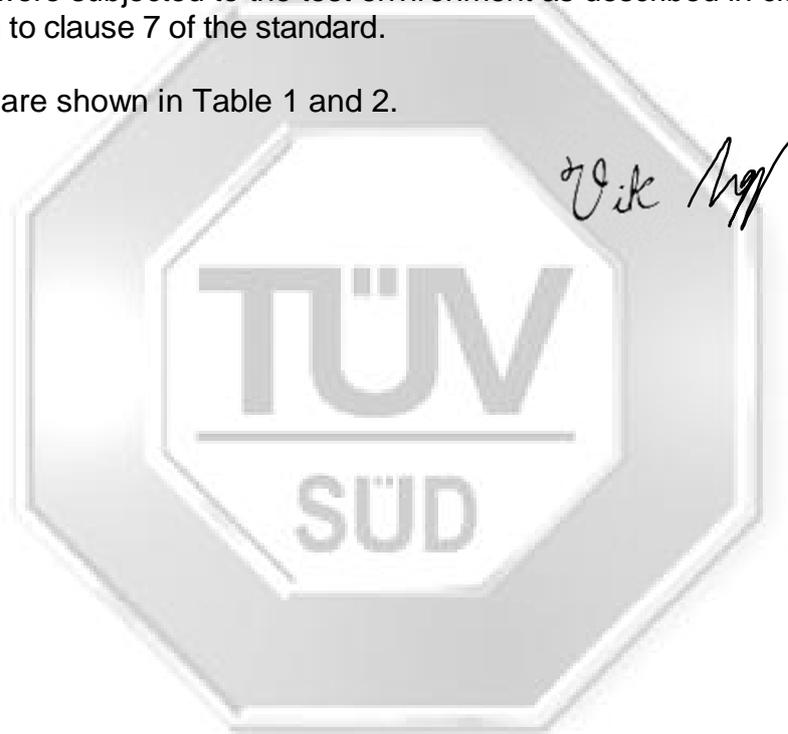
TEST PROCEDURE:

Prior to test, the specimens were prepared in accordance with clause 5 of the standard and conditioned at a temperature of $(23 \pm 2)^{\circ}\text{C}$ and relative humidity of $(50 \pm 5)\%$ for a minimum period of 48 hours.

The apparatus was constructed in accordance to clause 4 of the standard.

The specimens were subjected to the test environment as described in clause 4.1 and tested according to clause 7 of the standard.

The test results are shown in Table 1 and 2.



TEST RESULTS:

Table 1: Test Flame Surface Application Position

Temperature (°C)	24.5		R.H (%)	64.7		
Specimen thickness (mm)	12.8		Flame application time (sec)	30		
Specimen no.	1	2	3	4	5	6
Airflow velocity (m/s)	0.7	0.7	0.7	0.7	0.7	0.7
Ignition (Y/N)	N	N	N	N	N	N
Time for flame tip to reach 150mm (sec)	-	-	-	-	-	-
Maximum flame height (mm)	30	30	30	30	30	30
Flaming droplets presence (Y/N)	N	N	N	N	N	N
Filter paper ignited by flaming droplets / particles? (Y/N)	N	N	N	N	N	N

Table 1: Test Flame Edge Application Position

Temperature (°C)	24.5		R.H (%)	64.7		
Specimen thickness (mm)	12.8		Flame application time (sec)	30		
Specimen no.	1	2	3	4	5	6
Airflow velocity (m/s)	0.7	0.7	0.7	0.7	0.7	0.7
Ignition (Y/N)	Y	Y	Y	Y	Y	Y
Time for flame tip to reach 150mm (sec)	-	-	-	-	-	-
Maximum flame height (mm)	20	20	20	20	20	20
Flaming droplets presence (Y/N)	N	N	N	N	N	N
Filter paper ignited by flaming droplets / particles? (Y/N)	N	N	N	N	N	N

Yik Ng

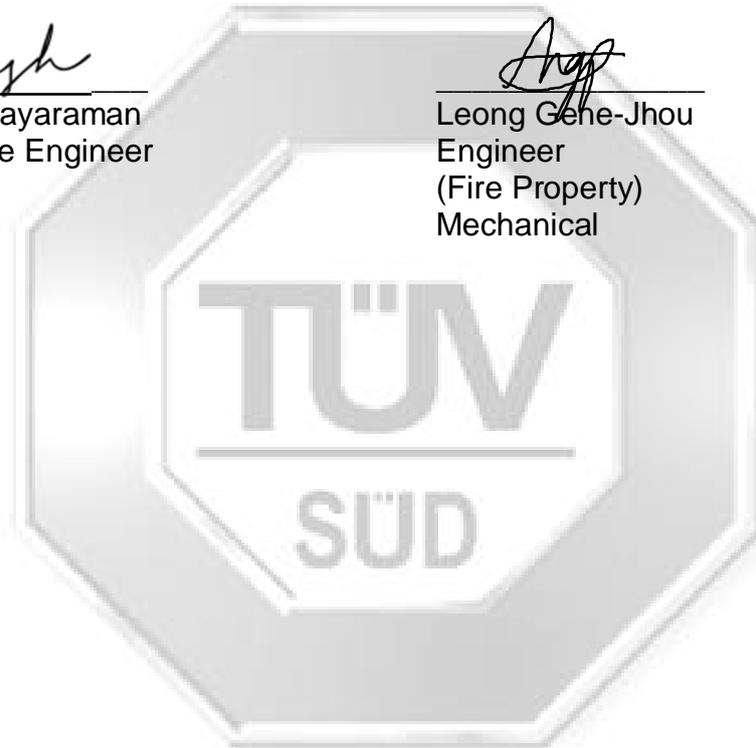


REMARKS:

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.


Vikneshwaran Jayaraman
Higher Associate Engineer


Leong Gene-Jhou
Engineer
(Fire Property)
Mechanical



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July 2011

