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Test Report Nr 11958

Sponsor

EMULCO-LABORATORIES N.V.
Belgicastraat 3
B-9042 GENT
BELGIUM

Material

MDF board

Trade Name

SPF Flame Retardant

Name of the manufacturer

PT. SUMATERA PRIMA FIBREBOARD
Km. 28 Desa Tanjung Seteko
Inderalaya - OKI
SUMATERA SELATAN
INDONESIA

Nature of the tests

Tests concerning the reaction to fire of this material according to the Royal Decree of 7 July 1994 amended by Royal Decree of 19 December 1997 and based on the standard BS 476 - Part 7 (1997).

This report consists of

6 pages with 1 annex

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1. THE REACTION TO FIRE

The aim of the reaction to fire tests is to determine the behaviour in a fire of the material concerning the contribution of this material to the development of a starting fire.

This behaviour is characterised by test results, only of a conventional nature, so that these test results do not have an "absolute value".

2. DESCRIPTION OF THE TEST METHOD

At the request of the sponsor, the test and the classification are carried out in accordance with "Annex 5 : Reaction to fire of materials– of the Royal Decree of 7 July 1994 defining the basic requirements for prevention of fire and explosion to which new buildings shall fulfil – modified by Royal Decree of 19 December 1997".

For this purpose the test method according to the British Standard "BS 476 – Part 7 – 1997 – Method for classification of the surface spread of flame of products" was used.

3. TEST SPECIMEN

The firm EMULCO-LABORATORIES N.V., Belgicastraat 3, B-9042 GENT, BELGIUM, provided the laboratory with a series of 7 samples of 0,265 m x 0,900 m.

Date of reception : 2005-11-03

Sampling : by the sponsor

Trade name : **SPF Flame Retardant**

Description :

This description is based on information given by the sponsor. All values are nominal, except for measured values, which are identified as MV. The measured values are mentioned in addition to the nominal values only if they differ more than 5 % from these nominal values.

The tested material consists of a fire retardant MDF board. The MDF consists of 100% rubber wood fibres with a melamide ureum formaldehyde (MUF) resin glue addition and a retardant additive.
For the test three samples were tested having a thickness of 3,5 mm and a surface mass of 2688 g/m², and three samples having a a thickness of 18,1 mm and a surface mass of 12514 g/m².
The samples were loosely mounted against a fibrocement board having a nominal thickness of 6 mm and a nominal density of 1800 kg/m³.

4. CONDITIONING

Before testing, the samples have been conditioned according to the specifications of the standard mentioned above.

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5. RESULTS

The tests have been carried out on: 2005-11-22.

a) Observations:

Test Nr. 1-3: 3 mm
Test Nr. 4-6: 18 mm

Test Nr.	1	2	3	4	5	6
Spread of flame after 1'30" (mm)	40	40	40	40	40	50
Spread of flame after 10' (mm)	40	40	140	40	40	70
Extinction (s)	60 (*)	60 (*)	> 600	60 (*)	60 (*)	60 (*)

(*) duration of the pilot burner
(**) extinction at 60s, re-ignition at 236

Annex 1: Surface spread of flame as a function of time τ.

b) Results:

V_m after 1'30" : 50 mm
V_i after 1'30" : 40 mm
V_m after 10' : 140 mm
V_i after 10' : 70 mm

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6. CONCLUSION

The test results relate only to the behaviour of the product under the particular conditions of the test. These results are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.

The test results are only valid for the specimens of the product as they have been tested. Small differences in the composition or thickness of the specimen may significantly affect the performance during the test and may therefore invalidate the test results.

In order to obtain test results which are representative for the product which is supplied or used, the conformity between the test specimen and the product should be assured. This is the role of the manufacturer and/or the supplier.

The MDF board '**SPF Flame Retardant** ', as described in § 3 and under the conditions of the test, **is classified in class A1** according to the Royal Decree of 7 July 1994 – Annex 5 : reaction to fire of materials – modified by Royal Decree of 19 December 1997, **and is classified in class 1**, according to the British Standard BS 476 - Part 7 – 1997.

Ghent, 0 8 DEC. 2005

ing. F. DUTRIEUE
Project Manager

Prof.dr.ir. P. VANDEVELDE
Director

BS 476 part 7 WG 1E

This document is the original version of this test report and is written in English.

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Surface spread of flame as a function of time τ.

Test Specimen Nr	1		2		3		4		5		6	
	min	sec	min	sec	min	sec	min	sec	min	sec	min	sec
50 mm		(*)		(*)	**0**	**30**		(*)		(*)		**33**
100 mm					**7**	**45**						(*)
150 mm						(*)						
200 mm												
250 mm												
300 mm												
350 mm												
400 mm												
450 mm												
500 mm												
550 mm												
600 mm												
650 mm												
700 mm												
750 mm												
800 mm												
850 mm												
885 mm												

(*) not reached