

## **CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1: 2002**

<b>Sponsor:</b>	Environmental Seals Ltd Envirograf House Barfrestone, DOVER Kent, CT15 7JG United Kingdom
<b>Prepared by:</b>	Efectis Nederland BV Lange Kleiweg 5 P.O. Box 1090 2280 CB RIJSWIJK
<b>Notified Body No:</b>	1234
<b>Product name:</b>	Standard particle board (12 mm and 18 mm) and MDF board (12 mm) - Envirograf product <u>42 HW01</u> coating combination
<b>Classification report no.:</b>	2008-CVB-R0678
<b>Issue number:</b>	1
<b>Date of issue:</b>	September 2008
<b>Project number:</b>	006.55494/01.01

This report is issued by Efectis Nederland BV (previously **TNO** Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1 January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatized in Efectis Nederland BV since 1<sup>st</sup> July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sinter-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.

This classification report consists of four pages and may only be used in its entirety.

## 1. Introduction

This classification report defines the classification assigned to standard particle board (12 mm and 18 mm) and standard MDF board (12 mm) - Envirograf product 42 HW01 coating combination in accordance with the procedures given in EN 13501-1:2002, further called as the “product combination”.

## 2. Details of classified product

### 2.1 General

The Envirograf product 42 HW01 is defined as a fire protective coating for wood and wood-based products.

### 2.2 Product combination description

12 mm and 18 mm thick standard particle board and 12 mm thick standard MDF board coated with one layer of the Envirograf product 42 HW01 at 8 m<sup>2</sup> per litre.

With the EN 13823 tests the product combination was mounted with a 35 mm deep air gap, by using soft wood battens, onto 12 mm standard wood fibre based board.

## 3. Test reports & test results in support of classification

### 3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Efectis Nederland	Environmental Seals Ltd. United Kingdom	2006-CVB-R0335 2006-CVB-R0336	EN ISO 11925-2 + EN 13823

### 3.2 Test results

Test method & test number	Parameter	No. tests + Product 42 coating combination	Results	
			Continuous parameter - mean (m)	Compliance with parameters
EN 13823	FIGRA <sub>0.2MJ</sub>	3 x 12 mm standard particle board	16 W/s	-
		3 x 18 mm standard particle board	7 W/s	
		3 x 18 mm standard MDF board	18 W/s	

Test method & test number	Parameter	No. tests + coating combination	Results	
			Continuous parameter - mean (m)	Compliance with parameters
EN 13823	FIGRA <sub>0.4MJ</sub>	3 x 12 mm standard particle board	15 W/s	-
		3 x 18 mm standard particle board	7 W/s	
		3 x 12 mm standard MDF board	18 W/s	
	THR <sub>600s</sub>	3 x 12 mm standard particle board	2.3 MJ	-
		3 x 18 mm standard particle board	0.8 MJ	
		3 x 12 mm standard MDF board	2.3 MJ	
	LFS <edge	All types	-	Compliant
	SMOGRA	3 x 12 mm particle board	0 m <sup>2</sup> /s <sup>2</sup>	-
		3 x 18 mm particle board	0 m <sup>2</sup> /s <sup>2</sup>	
		3 x 12 mm standard MDF board	0 m <sup>2</sup> /s <sup>2</sup>	
	TSP <sub>600s</sub>	3 x 12 mm particle board	37 m <sup>2</sup>	-
		3 x 18 mm particle board	44 m <sup>2</sup>	
		3 x 12 mm standard MDF board	39 m <sup>2</sup>	
	Flaming debris	All types	-	Compliant
EN-ISO 11925-2 surface flame attack	Fs ≤150 mm	6 All types	43 – 48 mm	Compliant
	Ignition of filter paper		-	Compliant
EN-ISO 11925-2 edge flame attack	Fs ≤150 mm	6 All types	37 - 56 mm	Compliant
	Ignition of filter paper		-	Compliant

#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with clause 10 of EN 13501-1:2002 resp. with clause 11 of EN 13501-1:2007.

## 4.2 Classification

The product, standard particle board (12 mm and 18 mm) and standard MDF board (12 mm) - Envirograf product 42 HW01 coating combination, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

**Reaction to fire classification: B-s1, d0**

## 4.3 Field of application

This classification is valid only for the following end use applications: as a wall or ceiling coating product with the following product parameters:

substrates	Standard particle board and standard MDF board
thickness	Minimum of 12 mm
coating (wet)	One coat, approximately 8 m <sup>2</sup> per litre

The classification is valid for the following substrates and air gaps: mounted as described, with an air gap, on a wooden substrate or any non-combustible (A1 or A2) substrate.

## 5. Limitations

This classification document does not represent type approval or certification of the product.

SIGNED



A.J. Lock

APPROVED



W. Langstraat

This report is issued by Efectis Nederland BV (previously TNO Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1 January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatized in Efectis Nederland BV since 1<sup>st</sup> July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sinter-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.