

CLASSIFICATION REPORT

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NOTIFIED BODY	Notified body for the European Regulation of the Construction Products Nº 305/2011 with number nº 1981.	
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TEST SPECIMEN	Type: WALLS AND CEILING COVERINGS Reference: "RANGE LUA431 SERIE GLOSS NO FIRE MULTILAYER NON YELLOWING "	
CONCERNING TO	CLASSIFICATION OF FIRE PERFORMANCE OF CONSTRUCTION PRODUCTS AND BUILDING ELEMENTS. CLASSIFICATION USING DATA OBTAINED IN REACTION TO FIRE TESTS. ACCORDING TO STANDARD UNE EN 13501-1:07+A1:2010.	
APPLICANT	IVM CHEMICALS S.R.L. DIVISIÓN: MILESÍ VIALE DELLA STAZIONE 3 27020 PARONA (PV) - ITALY	
DATE/S OF TEST	Reception of specimens: 06/09/2018 and 01/10/2018 Beginning of test: 18/09/2018 End of test: 11/10/2018	

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The test sample object of this report will remain in AIDIMME for a period of thirty days form the date of issuance thereof. After this period, the sample will be destroyed, so any claim must be carried out within these limits.

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ANNEX A1

1. INTRODUCTION

This classification report defines the classification assigned to the product described in paragraph 2, in accordance with the procedures pointed in the UNE-EN 13501-1:2007+A1:2010 "Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests".

2. PRODUCT DATA CLASSIFIED

2.1. Description and Identification of the test item. Inspection prior to test..

Sample corresponding to a range of transparent varnishes applied with spray gun on 19mm thickness fire retardant MDF boards (classified as B-s2,d0 according to the standard UNE EN 13501-1:07+A1:10). The application process consists of two layers of 120 g/m² of product "LUA43X Serie Gloss NO FIRE Multilayer non yellowing" (where X indicates the gloss degree that can be a letter or a number, as attached in the table) catalyzed at 10% with LNB99 Hardener PU NON YELLOWING. The set has an approximate density of (922 ± 30) Kg /m³. The drying time of the first layer is 12 hours and 24 hours for the second layer.

Serie 60 Gloss	LUA431
Serie 40 Gloss	LUA432
Serie 30 Gloss	LUA43G
Serie 20 Gloss	LUA433
Serie 10 Gloss	LUA434
Serie 5 Gloss	LUA435

The direct applicability of the fire reaction classification, according to classification standard UNE EN 13501-1, may be valid for all the products within the same family, if as family we mean the range of products within defined limits of variability of their parameters, for which it can be shown that the fire reaction classification does not change.

Thus, it is intended to classify a range of products where a selection is made based on the parameters contemplated by the range (gloss). According to customer information, the range to be tested basically consists of:

- Gloss: Any gloss degree

The tests, as well as the specimen selection are carried out taking as reference the different protocols defined by Sector Group SH02 (European body which coordinates all the aspects related to CE marking regarding the fire performance), and more specifically taking as reference document NB-CDP/SH02/06/029 "Classification following extended application: All specifications covering reaction to fire performance").

Likewise, also are used as reference documents, the document CEN/TS 15117:09 "Guidance on direct and extended application" and the recommendations given in the document EN 15725:2011/AC:2012 "Extended application reports on the fire performance of construction products and building elements".

Based on the above recommendations and the information provided by the customer, a representative selection of products of this range was adopted within the test plan:

- Gloss: Matte and gloss

The classification shall be valid for all the products in the range as long as in the selected products the performance obtained can be reached by all the other products in the same classification.

The commercial references of the selected walls coverings according to the customer are:

- “LUA431 NO FIRE MULTILAYER NON YELLOWING OP 60GLOSS”
(Ref. AIDIMME: 1809113-01)
- “LUA435 NO FIRE MULTILAYER NON YELLOWING OP 5GLOSS”
(Ref. AIDIMME: 1809113-02)

The range of products, according to the information provided by the customer, is referenced as:

- “RANGE LUA431 SERIE GLOSS NO FIRE MULTILAYER NON YELLOWING”

3. TEST REPORTS SUPPORTING THE CLASSIFICATION

Laboratory	Company/Customer	Test report reference	Test method
AIDIMME	IVM CHEMICALS S.R.L. DIVISION: MILESI	251.I.1810.095.ES.01	UNE EN 13823:12+A1:16
AIDIMME	IVM CHEMICALS S.R.L. DIVISION: MILESI	251.I.1810.095.ES.01	UNE EN ISO 11925-2:11

4. TEST RESULTS SUPPORTING THE CLASSIFICATION

Test method	Parameter	Númer of test	Results	
			Average of continuous parameter (m)	Parameter it has to fulfill
UNE-EN 13823:12+A1:16 (SBI) "LUA431 NO FIRE MULTILAYER NON YELLOWING OP 60GLOSS" Ref. AIDIMME: 1809113-01	FIGRA _{0,2MJ} (W/s)	1	95,56	Not applicable
	FIGRA _{0,4MJ} (W/s)		85,76	Not applicable
	THR _{600s} (MJ)		5,73	Not applicable
	SMOGRA (m²/s²)		5,77	Not applicable
	TSP _{600s} (m²)		70,60	Not applicable
	LFS (Y/N)		Not applicable	yes
	gotas/partículas en llama (Y/N)		Not applicable	yes
	SMOGRA corrected (m²/s²)		3,12	Not applicable
	TSP _{600s} corrected (m²)		49,54	Not applicable

Note: The laboratory has estimated the uncertainties of the tests, which are available to the client.

Test method	Parameter	Númer of test	Results	
			Average of continuous parameter (m)	Parameter it has to fulfill
UNE EN ISO 11925-2:11 (little burner) "LUA435 NO FIRE MULTILAYER NON YELLOWING OP 5GLOSS" Ref. AIDIMME: 1809113-02	$F_s \leq 150\text{mm}$	6	Not applicable	yes
	Ignition of the filter paper		Not applicable	yes
UNE-EN 13823:12+A1:16 (SBI) "LUA435 NO FIRE MULTILAYER NON YELLOWING OP 5GLOSS" Ref. AIDIMME: 1809113-02	FIGRA _{0,2MJ} (W/s)	3	93,78	Not applicable
	FIGRA _{0,4MJ} (W/s)		88,64	Not applicable
	THR _{600s} (MJ)		5,55	Not applicable
	SMOGRA (m ² /s ²)		5,74	Not applicable
	TSP _{600s} (m ²)		72,97	Not applicable
	LFS (Y/N)		Not applicable	yes
	gotas/partículas en llama (Y/N)		Not applicable	yes

Note: The laboratory has estimated the uncertainties of the tests, which are available to the client.

5. CLASSIFICATION AND FIELD OF APPLICATION

5.1. Classification.

The direct applicability of the fire reaction classification, according to classification standard UNE EN 13501-1, may be valid for all the products within the same family, if as family we mean the range of products within defined limits of variability of their parameters, for which it can be shown that the fire reaction classification does not change.

The classification is valid for all the products of the range since in the representative specimens selected according to the protocol defined by Sector Group SH02 (taking as reference document NB-CDP/SH02/06/029, document CEN/TS 15117:05 and document UNE EN 15725:11/AC:2012), a similar performance and the same classification are obtained.

Therefore, according to standard UNE-EN 13501-1:07+A1:2010, and view of the test results and the classification criteria are attached at the Annex (table 1 of the mentioned standard), the sample described in section 2.1 of this report, all according to the information provided by the customer and referenced by the same **“RANGE LUA431 SERIE GLOSS NO FIRE MULTILAYER NON YELLOWING”** is classified in relation to the fire behavior as:

Reaction to fire	Smoke production	Drops in flame
B	s2	d0

5.2. Field of application

The classified product is defined for the use in walls and ceilings coverings.

6. LIMITATIONS

The result of this report only refers to the products described in paragraph 2 thereof.

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

The duration of the validity of this classification report is subject to applicable law at the time of issue.

ANNEX

CLASSES OF BEHAVIOUR TO FIRE REACTION FOR CONSTRUCTION PRODUCTS
EXCLUDING FLOOR COVERINGS ACCORDING TO STANDARD UNE EN 13501-1:07 +A1: 2010

Class	Test method (s)	Classification criteria	Additional declaration required
A1	UNE-EN-ISO 1182:2011 ⁽¹⁾ ; and	$\Delta T \leq 30^{\circ}\text{C}$; and $\Delta m \leq 50\%$; and $t_f = 0$ (that is, no sustained flaming)	-
	UNE-EN-ISO 1716:2011	$\text{PCS} \leq 2,0 \text{ MJ,kg}^{-1} \text{ (1)}$; and $\text{PCS} \leq 2,0 \text{ MJ,kg}^{-1} \text{ (2) (2a)}$; and $\text{PCS} \leq 1,4 \text{ MJ,m}^{-2} \text{ (3)}$; and $\text{PCS} \leq 2,0 \text{ MJ,kg}^{-1} \text{ (4)}$	-
A2	UNE-EN-ISO 1182:2011 ⁽¹⁾ ; or	$\Delta T \leq 50^{\circ}\text{C}$; and $\Delta m \leq 50\%$; and $t_f \leq 20\text{s}$	-
	UNE-EN-ISO 1716:2011; and	$\text{PCS} \leq 3,0 \text{ MJ,kg}^{-1} \text{ (1)}$; and $\text{PCS} \leq 4,0 \text{ MJ,m}^{-2} \text{ (2)}$; and $\text{PCS} \leq 4,0 \text{ MJ,m}^{-2} \text{ (3)}$; and $\text{PCS} \leq 3,0 \text{ MJ,kg}^{-1} \text{ (4)}$	-
	UNE-EN-13823:12+A1:16 (SBI)	$\text{FIGRA} \leq 120 \text{ W,s}^{-1}$; and $\text{LFS} < \text{sample edge}$; and $\text{THR}_{600\text{s}} \leq 7,5 \text{ MJ}$	Smoke production ⁽⁵⁾ ; and Flamming Drops/particles ⁽⁶⁾
B	UNE-EN 13823:12+A1:16 (SBI); and	$\text{FIGRA}_{0,2} \leq 120 \text{ W,s}^{-1}$; and $\text{LFS} < \text{sample edge}$; and $\text{THR}_{600\text{s}} \leq 7,5 \text{ MJ}$	Smoke production ⁽⁵⁾ ; and Flamming Drops/particles ⁽⁶⁾
	UNE-EN-ISO 11925-2:2011 ⁽⁸⁾ ; Exposure = 30s	$F_s \leq 150\text{mm}$ in 60s	
C	UNE-EN 13823:12+A1:16 (SBI); and	$\text{FIGRA}_{0,4} \leq 250 \text{ W,s}^{-1}$; and $\text{LFS} < \text{sample edge}$; and $\text{THR}_{600\text{s}} \leq 15 \text{ MJ}$	Smoke production ⁽⁵⁾ ; and Flamming Drops/particles ⁽⁶⁾
	UNE-EN-ISO 11925-2:2011 ⁽⁸⁾ ; Exposure = 30s	$F_s \leq 150\text{mm}$ in 60s	
D	UNE-EN 13823:12+A1:16 (SBI); and	$\text{FIGRA}_{0,4} \leq 750 \text{ W,s}^{-1}$	Smoke production ⁽⁵⁾ ; and Flamming Drops/particles ⁽⁶⁾
	UNE-EN-ISO 11925-2:2011 ⁽⁸⁾ ; Exposure = 30s	$F_s \leq 150\text{mm}$ in 60s	
E	UNE-EN-ISO 11925-2:2011 ⁽⁸⁾ ; Exposure = 15s	$F_s \leq 150\text{mm}$ in 20s	Flamming Drops/particles ⁽⁷⁾
F	UNE-EN-ISO 11925-2:2011 ⁽⁸⁾ ; Exposure = 15s	$F_s > 150\text{mm}$ in 20s	Flamming Drops/particles ⁽⁷⁾

(1) For homogeneous products and substantial components of non-homogeneous products

(2) For any non-substantial component of non-homogeneous products

(2a) Alternatively, for any non-substantial component having an $\text{PCS} \leq 2,0 \text{ MJ/m}^2$, as long as the product meets the following criteria UNE-EN 13823:2012+A1:2016 (SBI): $\text{FIGRA} \leq 20 \text{ W,s}^{-1}$, $\gamma \text{ LFS} < \text{sample margin}$; $\gamma \text{ THR}_{600\text{s}} \leq 4,0 \text{ MJ}$; and $s1$; and $d0$,

(3) For any internal non-substantial component of non-homogeneous product

(4) For a product as a whole

(5) $s1 = \text{SMOGR} \leq 30\text{m}^2\text{s}^{-2}$ and $\text{TSP}_{600\text{s}} \leq 50\text{m}^2$; $s2 = \text{SMOGR} \leq 180\text{m}^2\text{s}^{-2}$ and $\text{TSP}_{600\text{s}} \leq 200\text{m}^2$; $s3 = \text{neither } s1 \text{ nor } s2$

(6) $d0 = \text{No flaming droplets and particles in UNE-EN 13823:2012+A1:2016 (SBI) in 600s}$; $d1 = \text{No Flaming droplets and particles for more than 10s in UNE-EN 13823:2012+A1:2016 (SBI) in 600s}$; $d2 = \text{neither } d0 \text{ nor } d1$; the ignition of the paper in UNE-EN-ISO 11925-2:2011 determines a classification $d2$,

(7) Success = no ignition of the paper (without classification) ; Fail = ignition of the paper (classification $d2$)

(8) Under conditions of surface flame attack and, if suitable for end conditions of product use, of edge flame attack.

The results of this/these test/s only refers to the object/s tested.

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