AIDIMME
TECHNOLOGY INSTITUTE

CLASSIFICATION REPORT
REACTION TO FIRE

ENSAYO
ISO 17025
Nº13 / LE027

NUMBER	**251.Z.2311.065.EN.01** Work sheet: **22301297**
DATE OF ISSUE	**November 13th, 2023**
PAGE	**The report consists of 5 pages consecutively numbered, an annex of 2 pages.**
TEST SPECIMEN	**Type: WALLS AND CEILINGS COVERINGS** **Reference: "TAF100 FLAMER FONDO PU TRANSP + TOF101 FLAMER ACABADO PU TRANSP OP70G"**
CONCERNING TO	**CLASSIFICATION OF FIRE PERFORMANCE OF CONSTRUCTION PRODUCTS AND BUILDING ELEMENTS. CLASSIFICATION USING DATA OBTAINED IN REACTION TO FIRE TESTS ACCORDING TO STANDARD EN 13501-1:2018.**
APPLICANT	**IVM CHEMICALS SRL. DIVISION: ILVA** **VIALE DELLA STAZIONE, 3** **27020 PARONA (PV) - ITALY**
DATE/S OF TEST	**Reception of specimens: 11/07/23 and 31/08/23** **Beginning of test: 17/07/2023** **End of test: 05/10/2023**

AUTORIZED SIGNATORIES

Signed.: Ms. Raquel Cánovas Ruiz	**Signed.: Mr. Stephane García Malpartida**
Technician Fire Lab	**Head of Section - Fire Laboratory**

Document digitally signed by a legal electronic signature.

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, therefore any verification that the client wishes to exercise, must be carried out within these limits.

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CONTENTS

1. INTRODUCTION

This classification report defines the classification assigned to the product described in paragraph 2, in accordance with the procedures pointed in the **EN 13501-1:2018** *"Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests".*

2. PRODUCT DATA CLASSIFIED

2.1 Inspection prior to test by the laboratory.

Test SBI and little burner
Samples corresponding to transparent varnished applied on MDF support. The sample is labelled in AIDIMME with the reference: **2308040-03**.

2.2. Description and Identification of the test item provided by the customer.

Samples corresponding to transparent varnish applied on MDF board with a thickness of 19 mm and a density of 760 Kg/m^3 (classified as B-s2,d0, according to UNE EN 13501-1). The application process consists of two layers of 150 g/m^2 each one of product **TAF100 FLAMER Fondo PU transparente**, catalysed 50% with TX78 Hardener, presenting an approximate density of (1111 ± 0.01) Kg/m^3, transparent and matte appearance, with a drying time between layers of the 24 hours. Subsequently, a layer of 120 g/m^2 of **TOF101 FLAMER Acabado PU Transparente OP70 Gloss**, catalysed 50% with TX78 Hardener which has an approximate density of (1020 ± 0.01) Kg/m^3, transparent and semi-gloss appearance, all this according to the information provided by the customer and referenced as:

- "TAF100 FLAMER FONDO PU TRANSPARENTE + TOF101 FLAMER ACABADO PU TRANSP OP70 G"
  (Ref. AIDIMME: 2308040-03)

3. TEST REPORTS SUPPORTING THE CLASSIFICATION

Laboratory	Company/Customer	Test report reference	Test method
ENSATEC	IVM CHEMICALS SRL. DIVISION: ILVA	251.I.2311.065.ES.01	UNE-EN 13823:21+A1:2023
AIDIMME	IVM CHEMICALS SRL. DIVISION: ILVA	251.I.2311.065.ES.01	UNE-EN ISO 11925-2:21

4. TEST RESULTS SUPPORTING THE CLASSIFICATION

Test method	Parameter	Numer of test	Results	
			Average of continuous parameter (m)	Compliance with parameters
UNE EN ISO 11925-2:21 (little burner) "TAF100 FLAMER FONDO PU TRANSPARENTE + TOF101 FLAMER ACABADO PU TRANSP OP70 G" Ref. AIDIMME : 2308040-03	Fs ≤ 150mm	12	Not applicable	Compliant
	Ignition of the filter paper		Not applicable	Compliant
UNE-EN 13823:21+A1:2023 (SBI) "TAF100 FLAMER FONDO PU TRANSPARENTE + TOF101 FLAMER ACABADO PU TRANSP OP70 G" Ref. AIDIMME : 2308040-03	FIGRA $_{0,2MJ}$ (W/s)	3	46.50	Compliant
	FIGRA $_{0,4MJ}$ (W/s)		42.56	Compliant
	THR_{600s} (MJ)		3.71	Compliant
	TSP_{600s} (m^2)		42.88	Compliant
	SMOGRA (m^2/s^2)		4.93	Compliant
	LFS (Y/N)		Not applicable	Compliant
	Falling of flaming droptles/particles (Y/N)		Not applicable	Compliant

Note 1: Test subcontracted to an external laboratory accredited by ENAC 288/LE 634 accreditation.

Test uncertainty

The uncertainty for the $FIGRA_{0.2MJ}$ and THR_{600s} parameters is 25% and 2% respectively.

The uncertainty for the SMOGRA y TSP_{600s} parameters is 10% and 5% respectively.

5. CLASSIFICATION AND FIELD OF APPLICATION

5.1. Classification.

Therefore, according to standard **EN 13501-1:2018**, and view of the test results and the classification criteria are attached at the Annex (table 1 of the mentioned standard), the simple described in section 2.2 of this report, all according to the information provided by the customer and referenced by the same **"TAF100 FLAMER FONDO PU TRANSPARENTE + TOF101 FLAMER ACABADO PU TRANSP OP70 G"** is classified in relation to the fire behavior as:

Reaction to fire	Smoke production	Drops in flame
B	**s1**	**d0**

5.2. Field of application

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

5.2.1 Product parameters

- Composition: MDF board (reaction to fire B-s2,d0) on which a process is applied (see description section 2.2). Variations not allowed.
- Color: Transparent. Variations not allowed.
- Mass per area (painting): 150 g/m^2 per layer (2 layers) of TAF100 FLAMER Fondo PU transparente and 120 g/m^2 of TOF101 FLAMER Acabado PU Transaprente OP70 Gloss. Variations not allowed.
- Support: Applications on any substrate with a density equal or higher to 570 Kg/m^3 with a minimum thickness of 19 mm and reaction to fire B-s2,d0 or better.

5.2.2 End-use application

- Joins: Vertical and horizontal joins are not allowed.
- Substrate: The product is mounted on any inert substrate with density equal or higher to 652.5 Kg/m^3, with a minimum thickness of (11 ± 2) mm and fire reaction classification A2-s1,d0 or better.

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.

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ANNEX

Table 1 - Classes of behaviour to fire reaction for construction products excluding floor coverings and thermal insulating productos for linear pipes according to standard UNE EN 13501-1:2019

Class	Test method (s)	Classification criteria	Addicional declaration required
A1	UNE-EN-ISO 1182 [a] *and*	$\Delta T \leq 30°C$; *and* $\Delta m \leq 50\%$; *and* $t_f = 0$ (that is, no sustained flaming)	-
	UNE–EN-ISO 1716	PCS ≤ 2,0 MJ/kg[a] *and* PCS ≤ 2,0 MJ/kg[b y c] and PCS ≤ 1,4 MJ/m^2 [d] and PCS ≤ 2,0 MJ/kg[e]	-
A2	UNE-EN-ISO 1182 [a] *or*	$\Delta T \leq 50°C$; *and* $\Delta m \leq 50\%$; *and* $t_f \leq 20s$	-
	UNE-EN-ISO 1716 *and*	PCS ≤ 3,0 MJ/kg[a]; *and* PCS ≤ 4,0 MJ/m^2 [d] and PCS ≤ 4,0 MJ/m^2 [d] and PCS ≤ 3,0 MJ/kg[e]	-
	UNE-EN 13823 (SBI)	FIGRA$_{0,2\ MJ}$ ≤ 120 W/s; *and* LFS < sample edge; *and* THR$_{600s}$ ≤ 7,5 MJ	Smoke production[f] and flamming drops/particles[g]
B	UNE-EN 13823 *and*	FIGRA$_{0,2\ MJ}$ ≤ 120 W/s *and* LFS < sample edge; and THR$_{600s}$ ≤ 7,5 MJ	Smoke production[f] and flamming drops/particles [g]
	UNE-EN-ISO 11925-2 [i] *Exposure = 30s*	Fs ≤ 150mm in 60s	
C	UNE-EN 13823 *and*	FIGRA$_{0,4\ MJ}$ ≤ 250 W/s *and* LFS < sample edge; and THR$_{600s}$ ≤ 15 MJ	Smoke production[f] and flamming drops/particles [g]
	UNE-EN-ISO 11925-2 [i] *Exposure = 30s*	Fs ≤ 150mm in 60s	
D	UNE,EN 13823 y	FIGRA$_{0,4\ MJ}$ ≤ 750 W,s^{-1}	Smoke production[f] and flamming drops/particles [g]
	UNE-EN-ISO 11925-2 [i] *Exposure = 30s*	Fs ≤ 150mm in 60s	
E	UNE-EN-ISO 11925-2 [i] *Exposure = 15s*	Fs ≤ 150mm in 20s	Flamming drops/particles[h]
F	UNE-EN-ISO 11925-2 [i] *Exposure = 15s*	Fs >150mm in 20s	

a For homogeneous prodcuts and substantial components of heterogeneous products.
b For any non-substantial external component of heterogeneous products
c Alternatively, for any non-substantial external component having a PCS≤ 2,0 MJ/m^2, as long as the product meets the following criteria Standard UNE-EN 13823 (SBI): FIGRA≤ 20 W/s, and LFS< sample margin; and THR$_{600s}$ ≤ 4,0 MJ y s1; and d0.
d For any internal non-substantial internal component of heterogeneous products.
e For the product as a whole
f s1= SMOGRA ≤ 30m^2/s^2 *and* TSP$_{600s}$ ≤ 50m^2 ; s2 = SMOGRA ≤ 180m^2/s^2 *and* TSP$_{600s}$ ≤ 200m^2;s3 = neither s1 nor s2
g d0 = No flamming droplets and particles in EN 13823 (SBI) in 600s
d1 = No flamming droplets and particles for more than 10s in UNE- EN 13823 (SBI) in 600,
d2 = neither d0 nor d1. The ignition of the paper in UNE EN ISO 11925-2 determines a classification d2.
h Success = no ignition of the paper (without classification) ; Fail = ignition of the paper (classification d2)
i Under conditions of surface flame attack and, if suitable for end conditions of product use, of edge flame attack

As stated in the document "**General Test Conditions**", accepted by signing the work plan, it is stated in paragraph 14:

When a declaration of conformity or classification is required, the decision rule to be applied shall follow the requirements of ILAC-G8:09/2019, in the following order (and shall be stated in the test report):

- Stated in the standard or applicable regulation.
- Agreed with the customer (within the possible options).
- If these requirements are not available, a binary statement (PASS/FAIL) shall be made for a simple Acceptance Rule, without considering the measurement uncertainty (Maximum probability of acceptance/false rejection: 50%).

In this case, the classification is made by binary statement (Compliance/Non-compliance) of the test parameters, for a simple Acceptance Rule, without taking into account the measurement uncertainty, in order to establish decision rules in the declaration of conformity. (Maximum probability of acceptance/false rejection: 50%, which **does not imply** that the probability associated with the present classification reaches this value).