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REACTION TO FIRE CLASSIFICATION IN ACCORDANCE TO THE STANDARD EN 13501-1:2018

Petitioner's reference:	**SOROMAP PEINTURES VERNIS** 3 rue Maurice Mallet, ZA de Béligon 17300 – Rochefort sur Mer Charente-Maritime
Prepared by:	**LGAI Technological Center, S.A. (APPLUS)** Campus UAB Ronda de la Font del Carme, s/n E - 08193 Bellaterra (Barcelona)
Product name:	**Bio Shrink Wrap**
Report No.:	**25/32302886-2**
Date of issue:	**31st March, 2025**

1- INTRODUCTION

This classification report defines the classification assigned to Bio Shrink Wrap in accordance with the procedures given in the EN 13501-1:2018 standard.

2. DETAILS OF CLASSIFIED PRODUCT

2.1.-General

According to the petitioner, the product Bio Shrink Wrap is defined as plastic shrink wrap.

2.2.- Description of the product

Samples of plastic shrink, with Applus internal code 25/30248, was received with the following indications in accordance with the technical specifications provided by the petitioner:

COMMERCIAL REFERENCE: **Bio Shrink Wrap**

Polyethylene, plastic shrink wrap, with a thickness of 0,19 mm, a density of 900 kg/m^3, a superficial density of 0,17 kg/m^2, green colour and smooth appearance.

Fixing system: The product was fixed mechanically with staples on a gypsum plasterboard substrate. (Gypsum plasterboard in accordance with the specifications of the standard EN 13238:2010).

Manufacturer: BIOAQUALIFE, 43 Celestial Drive, Narragansett, RI 02882

3- REPORT AND RESULTS IN SUPPORT OF THIS CLASSIFICATION

3.1- Reports

Name of Laboratory	Name of Petitioner	Report ref. no.	Test method and date
Applus – LGAI	SOROMAP PEINTURES VERNIS	25/32302886-1	EN ISO 11925-2:2020 25-03-2025
			EN 13823:2020+A1:2022 25-03-2025

3.2- Results of the Tests

Test Method	RESULTS – Bio Shrink Wrap			
	CRITERIA CLASS B	**Nº TESTS**	**AVERAGE**	**COMPLIANCE**
EN ISO 11925-2:2020	$F_s \leq 150$ mm within 60 s	12	$F_s < 150$ mm	**YES**
EN 13823:2020+A1:2022	$FIGRA_{0,2\ MJ} \leq 120$ W/s	3	101	**YES**
	LFS < < edge of the sample	3	< to edge	**YES**
	$THR_{600s} \leq 7,5$ MJ	3	1,8	**YES**
	CRITERIA subclass 's1'	**Nº TESTS**	**AVERAGE**	**COMPLIANCE**
	SMOGRA ≤ 30 m^2/s^2	3	0	**YES**
	$TSP_{600s} \leq 50$ m^2	3	25	**YES**
	CRITERIA subclass 'd0'	**Nº TESTS**	**AVERAGE**	**COMPLIANCE**
	Fall of droplets/particles in flames within 600 s	3	NO	**YES**

4- CLASSIFICATION AND FIELD OF APPLICATION

4.1- Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018: "Classification in terms of the behaviour to fire of construction products and building elements. Part 1: Classification made from the data gathered during fire reaction tests".

4.2- Classification

The product, Bio Shrink Wrap 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

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

REACTION TO FIRE CLASSIFICATION: B-s1,d0

This classification is only valid for the final conditions of use described in the present report.

4.3.- Field of application

- This classification is valid for the following product parameters:

The classification is only valid for the product characteristics shown, with the following parameters being extended:

- Variable parameter 1: Substrate

The tests were carried out with the product applied on a gypsum plasterboard substrate, with a density of (870± 50) kg/m3, a thickness of (11 ± 2) mm.

The obtained results are valid for substrates of end use gypsum plasterboard and also any end use substrate of classes A1 and A2-s1,d0, and comprising a density of at least 75% of the nominal density of the test substrate, according to standard EN 13238:2010.

- The classification is valid for the following final use applications:

The product Bio Shrink Wrap is intended to be used as ships covering.

Substrate	Gypsum plasterboard
Fixing method	Mechanically
Joint	-
Air cavity	-
Others	-

5.- LIMITATIONS

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

Digitally signed by
Salvador Suñol Gálvez

Digitally signed by Vanessa
Tutusaus Domingo

Laboratory Manager LGAI Technological Center S.A. (APPLUS)	Responsible of Euroclasses LGAI Technological Center S.A. (APPLUS)

The uncertainty expanded of the measure U, has been obtained by multiplying the typical measurement uncertainty by the coverage factor k, such that the coverage probability is approximately 95%

The results refer exclusively to the samples tested at the time and under the conditions indicated. The results refer exclusively to the samples tested at the time and under the conditions indicated. The decision rule agreed with the client to give a declaration of conformity with the specification or standard, is following a simple binary decision rule, in line with what is established ILAC G8.

Uncertainty associated to the Small Burner Test: Time=±1,2
Uncertainty associated to the Single Burned Item (SBI) Test: FIGRA0,2MJ ±27 W/s; THR600s=±1,9 MJ; SMOGRA=±7 m^2/s^2; TSP600s=±13 m^2; Time (Fall of droplets/particles) =N.A.

Applus+ guarantees that this task has been carried out in compliance with the requirements of our Quality and Sustainability System, and furthermore, that the contractual terms and legal regulations have been complied with. In the framework of our improvement programme, we would appreciate any comments you may deem appropriate. These should be addressed to the manager who signs this document, or to the Quality Director of Applus+, at the following address:satisfaccion.cliente@applus.com