

Classification report

This document is an authorized English version of the reaction to fire classification report RC-RF 0019/2021-URF issued by the Reaction to Fire Testing Laboratory of the National Laboratory of Civil Engineering (LNEC/EM-URF).

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2018-en (and COMMISSION DELEGATED REGULATION (EU) 2016/364 of 1 July 2015

1 | Identification:

Description of the sample:

Self-adhesive vinyl films (monomeric PVC), **“PVC Vinyl 100 microns permanent blackout”, white glossy, white matte**, smooth finish, with acrylic adhesive, for use on non-porous flat surfaces (excluding floors).

Classification report No:

0019/2021-URF

Date of issue:

2021-03-16

2 | Introduction:

This classification report defines the reaction to fire classification assigned to the self-adhesive monomeric PVC films for promotional and decorative applications **“PVC Vinyl 100 microns permanent blackout”**. smooth finish (soft calendered), white matte or white glossy, with acrylic adhesive and removable Double Sided PE, for flat and non-porous surfaces (excluding floorings), in accordance with the procedures given in EN 13501-1:2018 - *“Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests”* (and COMMISSION DELEGATED REGULATION (EU) 2016/364 of 1 July 2015).

LNEC’s Reaction to Fire Testing Laboratory (LNEC/EM-URF) is accredited by IPAC (L0488-Ensaio) to perform the fire tests (vd. 4) supporting the assigned classification.

3 | Details of the classified Product:

3.1 General

The classified products for decorative and promotional applications, for flat and non-porous surfaces (excluding floors), consisted of self-adhesive monomeric PVC films **“PVC Vinyl 100 microns permanent blackout”** and, smooth finish (soft calendered), white matte or white glossy.

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3.2 Product description

In accordance with the information and the Technical Data Sheets supplied by the sponsor, the tested product samples presented the following generic characteristics:

(Sample 61/2020-1) – “PVC Vinyl 100 microns permanent blackout”:

- Commercial designation: **“PVC Vinyl 100 microns permanent blackout”**
- Material (film): self-adhesive vinyl, monomeric PVC film
- Finish reference - **Glossy**
- Finish: brushed
- Colour : **white**
- Mass per unit area (**nominal** value): 128 g/m² (± 10%)
- Thickness: 100 µm (± 10%)
- Adhesive: clear acrylic
- Liner (removable): Double Sided PE
 - Mass per unit area (**nominal** value): 125 g/m² (± 10%)
 - Thickness (**nominal** value): 118 µm (± 10%)
- Field of application: flat, smooth non porous surfaces (excluding floors)

(Sample 61/2020-1) – “PVC Vinyl 100 microns permanent blackout”

- Commercial designation: **“PVC Vinyl 100 microns permanent blackout”**
- Material (film): self-adhesive vinyl, monomeric PVC film
- Finish reference - **matte**
- Finish: brushed
- Colour : **white**
- Mass per unit area (**nominal** value): 128 g/m² (± 10%)
- Thickness: 100 µm (± 10%)
- Adhesive: clear acrylic
- Liner (removable): Double Sided PE
 - Mass per unit area (**nominal** value): 125 g/m² (± 10%)
 - Thickness (**nominal** value): 118 µm (± 10%)
- Field of application: flat, smooth non porous surfaces (excluding floors)

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4.1 | Test reports and test results in support of classification:

Name of Laboratory	Name of sponsor	Report No.	Test method and date
LNEC/EM-URF	[REDACTED]	0006/2021-URF	EN ISO 11925-2:2020
		0007/2021-URF	EN ISO 11925-2:2020
		0032/2021-URF	EN ISO 11925-2:2020
		0016/2021-URF	EN 13823:2020
		0031/2021-URF	EN 13823:2020

4.2 Test results:

Test method(s)	Parameter	No. test specimens	Results	
			Continuous parameter mean values * (individual values)	Compliance with parameters
EN 13823:2020 (SBI test)	FIGRA _{0,2MJ} (W/s)	1 + 1 + 1 + 1 (1)	1.2 (--- / 4.9 / --- / ---)	YES
	FIGRA _{0,4MJ} (W/s)		1.2 (--- / 4.9 / --- / ---)	(YES)
	LFS < edge		YES (YES / YES / YES / YES)	YES
	THR _{600s} (MJ)		0.9 (0.6 / 0.9 / 0.8 / 1.1)	YES
	SMOGRA (m ² /s ²)		--- (--- / --- / --- / ---)	YES
	TSP _{600s} (m ²)		25 (20 / 22 / 23 / 33)	YES
	FDP		NO (NO / NO / NO / NO)	YES
Test method(s)	Parameter	No. test specimens	Results	
			Continuous parameter (individual values)	Compliance with parameters
EN ISO 11925-2:2020	Fs		< 20	YES (Fs ≤ 150 mm)
Edge and surface exposure to flame	Flaming droplets/particles	2 + 2 ⁽²⁾ 3 + 3 ⁽²⁾ 1 + 1 ⁽²⁾	NO	YES
	Ignition of the filter paper		NO	YES
Exposure time: 30 s				

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5 | Classification and field of application:

5.1 Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018, December 2018 (and criteria defined in COMMISSION DELEGATED REGULATION (EU) 2016/364 of 1 July 2015).

5.2 Classification

Self-adhesive monomeric PVC films for promotional and decorative application “**PVC Vinyl 100 microns permanent blackout**” white matte or white glossy, smooth finish, in relation to their reaction to fire behaviour are classified (*see also* 5.3):

B

The additional classification in relation to smoke production is:

S1

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

D0

The format of the reaction to fire classification **except for floorings** is:

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

i.e., **B-s1, d0**

Reaction to fire classification: B-s1, d0

5.3 Field of application:

This classification is valid for self-adhesive monomeric PVC films for promotional and decorative applications “**PVC Vinyl 100 microns permanent blackout**” colour **white, matte** or **glossy**, smooth finish, when **applied directly** on **non-combustible surfaces** (classes **A1** or **A2-s1, d0**) having a density greater than 1350 kg/m³ and a thickness equal or greater than 9 mm.

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This classification is **not applicable** to uses of the product over existing coatings, and to painted or printed monomeric PVC films, and is also valid for **PVC Vinyl** (monomeric PVC) films, with the following characteristics:

- Mass per unit area (**nominal** value): $\leq 145 \text{ g/m}^2$
- Thickness (**nominal** value): $\leq 110 \text{ }\mu\text{m}$
- Colour: **white**
- Finish: smooth, **matte** or **glossy**