

Reaction to fire classification report No. 20233G

Owner of the classification report

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Introduction

This classification report defines the classification assigned to the product '**NUDEC®PETg**' in accordance with the procedures given in the standard EN 13501-1:2018: Fire classification of construction products and building elements - Part 1: classification using data from reaction to fire tests.

This classification report consists of 5 pages and may only be used or reproduced in its entirety

1. DETAILS OF CLASSIFIED PRODUCT

a) General

The product **NUDEC®PETg** is defined as a 'Polyethyleneterephthalate Copolymer (PETg) sheet'.

Its classification is valid for the following end use application(s):

Internal and external use in roofs, walls and ceilings

b) Product description

This description is based on information given by the sponsor.

Nominal values	
NUDEC®PETg	
Type of product	Light transmitting flat solid Polyethyleneterephthalate Copolymer (PETg) sheet (monolayer).
Manufacturer	NUDEC SA
Thickness	2 mm – 8 mm (classified range) Tested up to 12 mm in EN ISO 11925-2
Density of the PETg (kg/m ³)	1270
Use of fire retardants	No
Colour and light transmission	Clear / TL: 88 %
Organic pigmentation (weight %)	0
Surface texture	Smooth

More details (e.g. mounting and fixing) are available in the test reports in support of this classification (§2a).

2. TEST REPORTS AND EXAP REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

a) Test reports (and EXAP reports)

Name of the laboratory	Name of the sponsor	Test report ref. No. and test date	Test method and date
WFRGENT nv Ghent, Belgium	NUDEC SA	20233D: 27/02/2020 20233E: 27/02/2020	EN ISO 11925-2:2010/AC:2011
WFRGENT nv Ghent, Belgium	NUDEC SA	20233B: 17/04/2020 & 30/04/2020 20233C: 17/04/2020, 05/05/2020 & 06/05/2020	EN 13823:2010+A1:2014
WFRGENT nv Ghent, Belgium	NUDEC SA	20233F	EXAP according to CEN/TS 15117 (August 2005)

b) Test results

Official test results used for the classification

Test method	Parameter	Number of tests	Results		Criteria for Class B-s1,d0	
			Continuous parameters Mean	Compliance parameters	Continuous parameters	Compliance parameters
EN ISO 11925-2 (*) (1) 30 s flame application: <u>Surface exposure</u> - front side <u>Edge exposure</u> - front side	$F_s \leq 150$ mm Ignition filter paper $F_s \leq 150$ mm Ignition filter paper	6 6	(-) (-) (-) (-)	Yes No Yes No	(-) (-) (-) (-)	Yes No Yes No
(*) The material melted but didn't pull away from the pilot burner. (1) Based on the results obtained in test report No. 20233E – NUDEC®PETg 2 mm.						
EN 13823 (2)	FIGRA _{0,2 MJ} (W/s) FIGRA _{0,4 MJ} (W/s) LFS _{<edge} THR _{600s} (MJ) SMOGRA (m ² /s ²) TSP _{600s} (m ²) Flaming droplets/particles f < 10 s f > 10 s	3	66 66 (-) 1,4 19 31 (-) (-)	(-) (-) Yes (-) (-) (-) No No	≤ 120 (-) (-) ≤ 7,5 ≤ 30 ≤ 50 (-) (-)	(-) (-) Yes (-) (-) (-) No No
(2) Based on the results obtained in test report No. 20233C – NUDEC®PETg 8 mm.						

(-) Not applicable.

Comparative test results used for the determination of the worst case thickness

EN ISO 11925-2 Test report No. 20233D	$F_s \leq 150$ mm	Ignition filter paper	Average maximal flame spread (*) (mm)
Sample 1 (**): NUDEC®PETg 2 mm	Yes	No	40
Sample 2: NUDEC®PETg 12 mm.	Yes	No	30

(*) The average maximal flame spread value was calculated over all executed edge exposures. Surface exposure was not taking into account because no flame spread was observed.

(**) The test results of this sample were re-used in the official test report No. 20233E.

EN 13823 Test report No. 20233B	FIGRA _{0,2 MJ} (W/s)	FIGRA _{0,4 MJ} (W/s)	THR _{600S} (MJ)	SMOGRA (m ² /s ²)	TSP _{600S} (m ²)
Sample 1 (*): NUDEC®PETg 8 mm	67	67	1,3	15	31
Sample 2: NUDEC®PETg 2 mm	0	0	0,4	0	21

(*) The test results of this sample were re-used in the official test report No. 20233C (as sample 1).

3. CLASSIFICATION AND FIELD OF APPLICATION

a) Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

b) Classification

The product **NUDEC®PETg** in relation to its reaction to fire behavior is classified as:

Fire behavior	Smoke production	Flaming droplets
B	s1	d0

c) Field of application

This classification for the product as described in §1b, is valid for the following end use applications:

- Freestanding according to EN 13823 (air gap > 80 mm)
- With protection of cut edges (edge finishing with a material of at least Euro class A2-s1,d0), e.g. a metal frame
- Without joints

This classification is valid for the following product parameters:

- Nominal thickness: 2 mm – 8 mm
- Nominal density: 1270 kg/m³
- Colour and light transmission: Clear / TL: 88%
- Organic pigmentation: None
- Surface texture: Smooth
- No use of fire retardants

4. RESTRICTIONS

At the time the standard EN 13501-1:2018 was published, no decision was made concerning the duration of validity of a classification report.

Provisions of Regulation (EU) 305/2011, commonly known as the Construction Products Regulation (CPR), prevail over any conflicting provisions in the harmonized standards and technical specifications.

5. WARNING

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

According to the information mentioned by the sponsor on the technical information sheet there was no product standard for CE marking available at the time the classification report for the tested material/product was drafted.

When such a product standard is published, this report may be submitted again to the laboratory to evaluate the adequacy of the report for CE marking.

PREPARED BY

APPROVED BY

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