

## ***Reaction to fire classification report Nr 15279E***

### **Owner of the classification report**

DUPONT DE NEMOURS

A. Spinoystraat 6

2800 Mechelen

BELGIUM

### **Introduction**

This classification report defines the classification assigned to the product '**Corian® Custom Grade**' in accordance with the procedures given in the standard EN 13501-1+A1: 2009: Fire classification of construction products and building elements - Part 1: classification using data from reaction to fire tests.

**This classification report consists of 6 pages**

## 1. DETAILS OF CLASSIFIED PRODUCT

### a) Nature and end use application

The product **Corian® Custom Grade** is defined as a 'composite panel'.  
Its classification is valid for the following end use application(s):  
'Used as solid surface material in construction and decorative applications, interior and exterior'.

### b) Description

Nominal value	
<b>CORIAN® CUSTOM GRADE</b>	
Material	The tested product is a solid, non-porous, homogeneously surfacing material composed of $\pm 1/3$ acrylic resin (also known as PolyMethyl MethAcrylate or PMMA), and $\pm 2/3$ Aluminum Trihydrate (ATH) and pigments.
Manufacturer	Dupont De Nemours
Total thickness (mm)	6 & 12
Total density (kg/m <sup>3</sup> )	1750
Colour	NP11073 Bone
<b>MOUNTING &amp; FIXING</b>	
Fixing	The material was glued onto the substrate
Adhesive	
<i>Generic type</i>	Silicone
<i>Application rate</i>	190 g/m <sup>2</sup>
Substrate	Particle board, not fire retardant treated (12mm; 680 kg/m <sup>3</sup> )

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

### a) Test reports

Name of the laboratory	Name of the sponsor	Test report ref. Nr.	Test method
WFRGENT nv Ghent, Belgium	DUPONT DE NEMOURS Mechelen, Belgium	15279C 15279D	EN 13823 (July 2010)
WFRGENT nv Ghent, Belgium	DUPONT DE NEMOURS Mechelen, Belgium	15279A 15279B	EN ISO 11925-2 (November 2010)
WFRGENT nv Ghent, Belgium	DUPONT DE NEMOURS Mechelen, Belgium	15279F	EXAP according to CEN/TS 15117

### b) Test results

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) 30s flame application: <u>Surface exposure</u> - front side <u>Edge exposure</u> - mid point 1,5mm behind surface	$F_s \leq 150\text{mm}$ Ignition filter paper	6	(-) (-)	Yes No	(-) (-)	Yes No
	$F_s \leq 150\text{mm}$ Ignition filter paper	6	(-) (-)	Yes No	(-) (-)	Yes No
	FIGRA <sub>0,2 MJ</sub> (W/s)	3	44	(-)	$\leq 120$	(-)
	FIGRA <sub>0,4 MJ</sub> (W/s)		44	(-)	$\leq 120$	(-)
LFS <sub>&lt;edge</sub>	(-)		Yes	(-)	Yes	
THR <sub>600s</sub> (MJ)	6,7		(-)	$\leq 7,5$	(-)	
SMOGR <sub>A</sub> (m <sup>2</sup> /s <sup>2</sup> )	0		(-)	$\leq 30$	(-)	
TSP <sub>600s</sub> (m <sup>2</sup> )	10		(-)	$\leq 50$	(-)	
Flaming droplets/particles						
f<10s	(-)	No	(-)	No		
f>10s	(-)	No	(-)	No		

(-) Not applicable

(\*) The material melted but didn't pull away from the pilot burner.

(1) Based on the results obtained in test report Nr. 15279B (Corian® Custom Grade 6mm)

(2) Based on the results obtained in test report Nr. 15279D (Corian® Custom Grade 6mm)

		Corian® Custom Grade 6mm	Corian® Custom Grade 12mm
Edge exposure	Fs □ 150mm	Yes	Yes
	Ignition filter paper	No	No
	Maximal flame spread (mm)	16,7	15,8

Based on the results obtained in test report Nr. 15279A: only edge exposure was performed.

	FIGRA (W/s)	THR <sub>600s</sub> (MJ)	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )	TSP <sub>600s</sub> (m <sup>2</sup> )
Corian® Custom Grade 6mm	49	7,4	0	8
Corian® Custom Grade 12mm	19	2,3	0	15

Based on the results in test report Nr. 15279C: one single test on each product has been carried out instead of the standard three replicates.

### 3. CLASSIFICATION AND DIRECT FIELD OF APPLICATION

a) Reference and direct field of application

This classification has been carried out in accordance with EN 13501-1+A1: 2009.

b) Classification

The product **Corian® Custom Grade** 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 conditions :

- Substrate: Euroclass D-s2, d0 or better with a nominal thickness of at least 10 mm and a nominal density of at least 510 kg/m<sup>3</sup>
- Without an airgap
- Fixing: Directly glued onto the substrate with silicone (190 g/m<sup>2</sup>)
- Without joints

This classification is valid for the following product parameters:

- Nominal thickness : all thicknesses between or equal to 6mm and 12mm.
- Nominal density: 1750 kg/m<sup>3</sup>
- Colour: The colours Glacier White, Bone, Vanilla, Glacier Ice, Bisque, Designer White, Cameo White and all colours with a calorific value lower than or equal to 9,9 MJ/kg

### 4. RESTRICTIONS

At the time the standard EN 13501-1+A1:2009 was published, no decision was made concerning the duration of validity of a classification report.



**5. WARNING**

This classification report does not represent type approval nor certification of the product.

The following statement is included in accordance with Fire Sector Group Recommendation 001rev2:

The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of a system 3 attestation of conformity and CE marking under the Construction Products Directive.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

Report	Name	Signature (*)	Date
Prepared by	I. LAMMERTYN		2 2 DEC. 2011
Reviewed by	ir. K. CATRY		2 2 DEC. 2011

(\*) For and on behalf of "WFRGENT nv"

EN 13501-1 B-C-D WG 3E\*

This document is the original version of this classification report and is written in English.  
This report may be used only literally and completely for publications. - For publications of certain texts, in which this report is mentioned, our permission must be obtained in advance.