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Testing. Advising. Assuring.

**Title:**

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1:2007+A1:2009

**Notified Body No:**

0833

**Product Name:**

"Hi-Macs Natural Acrylic Stone"

**Report No:**

347196

**Issue No:**

1

**Prepared for:**

LG Hausys Europe GmbH,  
12, Avenue des Morgines,  
Petit-Lancy, Switzerland, 1213

**Date:**

16<sup>th</sup> January 2015



0249

## 1. Introduction

This classification report defines the classification assigned to "Hi-Macs Natural Acrylic Stone", a solid surface acrylic sheet, in accordance with the procedures given in EN 13501-1:2007 +A1: 2009

## 2. Details of classified product

### 2.1 General

The product, "Hi-Macs Natural Acrylic Stone", a solid surface acrylic sheet is defined as a rigid plastic sheet suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The product, "Hi-Macs Natural Acrylic Stone", a solid surface acrylic sheet, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		12 mm 'Hi-Macs' solid surface acrylic sheet adhered to a gypsum fibreboard substrate
Product reference of composite		"Hi-Macs Natural Acrylic Stone"
Name of manufacturer of composite		LG Hausys
Thickness of overall composite		22 mm
Weight per unit area of composite		17.32 kg/m <sup>2</sup>
Solid surface acrylic sheet	Generic type	Solid surface acrylic sheet
	Product reference	"Natural Acrylic Stone"
	Name of manufacturer	LG Hausys
	Thickness	12 mm
	Density	1.67 g/cm <sup>3</sup>
	Colour reference	Any – <b>See Note 3 below</b>
	Trade name of flame retardant	Aluminium Hydroxide
	Generic type of flame retardant	Inorganic filler
	Amount of flame retardant	61%
Adhesive	Generic type	Silicone
	Product reference	"S 94"
	Name of manufacturer	Otto-Chemie
	Colour reference	"Translucent"
	Thickness	2 mm
	Application method	Stripes
	Flame retardant details	<b>See Note 1 below</b>
Curing process	Air curing	
Substrate	Generic type	Gypsum plasterboard as in EN 13238
	Thickness	12.5mm
Brief description of manufacturing process		<b>See Note 2 below</b>

**Note 1: The sponsor was unable to provide this information.**

**Note 2: The sponsor was unwilling to provide this information.**

**Note 3: Colours can be any colour from the standard and sparkle colours; Marmo-type colours named: M103 Bologna; M104 Roma and M105 Verona are excluded from this range.**

### 3. Test reports/extended application reports & test results in support of classification

#### 3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova Warringtonfire	LG Hausys Europe GmbH	WFR 347018	EN ISO 11925-2
Exova Warringtonfire	LG Hausys Europe GmbH	WFR 347017, WFR 347016, WFR 347015	EN 13823
Exova Warringtonfire	LG Hausys Europe GmbH	WFR 347194	EN/TS 15117

#### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	Figra <sub>0.2 MJ</sub> (W/s)	3+2	51.0	Compliant
	THR <sub>600 s</sub> (MJ)		7.25	Compliant
	Smogra (m <sup>2</sup> /s <sup>2</sup> )		1.5	Compliant
	TSP <sub>600 s</sub> (m <sup>2</sup> )		2.4	Compliant
	LFS (y/n)		No	Compliant
	Flaming droplets (y/n)		nil	Compliant
	<10 s (y/n) >10 s (y/n)			
EN ISO 11925-2 30 s surface exposure	Flame spread (mm) Flaming droplets (y/n)	6	Nil none	Compliant Compliant

30 s edge exposure	Flame spread (mm) Flaming droplets (y/n)	6	nil none	Compliant Compliant
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#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007 +A1: 2009

##### 4.2 Classification

The product, "Hi-Macs Natural Acrylic Stone", a solid surface acrylic sheet, in relation to its reaction to fire behaviour is classified:

**Reaction to fire classification: B-s1, d0**

##### 4.3 Field of application

The tests results are valid for the following end use applications:

- i) Wall or ceiling applications
- ii) Used over any substrate of class A2 (including paper-faced gypsum plasterboard) or better with density of 525 kg/m<sup>3</sup> or higher, with a silicone adhesive as described in this report.

This classification is also valid for the following product parameters:

Colour	any colour, any pattern
Product thickness	12 mm
Product composition	No variation allowed

## 5 Limitations

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

### SIGNED

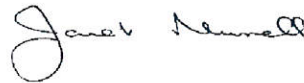


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**Frans Paap**

Certification Engineer

### APPROVED



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**Janet Murrell**

Technical Manager

on behalf of **Exova warringtonfire**

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