Title:

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1: 2002

Notified Body No:

0833

Product Name:

Flame retardant grade PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards.

Report No:

155036

Issue No:

1



Gradus Accessories, Park Green, Macclesfield, Cheshire, SK11 7LZ

Date:

8th June 2006



1. Introduction

This classification report defines the classification assigned to a flame retardant grade, PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards, in accordance with the procedures given in EN 13501-1:2002

2. Details of classified product

2.1 General

The product, a flame retardant grade, PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards.

2.2 Product description

The product, a flame retardant grade, PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	Flame retardant grade PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards.	
Trade name / product reference	See Note 1 Below	
Detailed description / composition details	Polyvinyl Chloride	
Name of manufacturer of PVC resin	See Note 1 Below	
Name of sheet extruder	Gradus Accessories	
Density / weight per unit area	1430kg/m ³	
Thickness	2.00mm	
Colour	"Natural"	
Flame retardant details	The sponsor was unable to provide this information	
Brief description of manufacturing process	Extrusion. The sponsor did not provide any further information relating to the manufacturing process	
Air space details	A 40mm ventilated cavity was situated between the reverse face of each specimen and the substrate	
Substrate Details	12.5mm thick paper faced plasterboard with a density of 800kg/m ³	

Note 1: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

The sponsor of the report has confirmed that they purchase their flame retardant grade, PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards from two separate suppliers.



Material from both suppliers has been tested to determine whether or not there is a difference in classification. The results indicate that the material fabricated from both suppliers falls in to the same classification and therefore PVCu from either supplier can be used in the manufacture of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards.

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 method / extended application rules & date
warringtonfire	Gradus Accessories	WF 153992, 153993	EN 13823
warringtonfire	Gradus Accessories	WF 153994	EN ISO 11925-2

3.2 Test results

Test method & test			Results		
number	Parameter	No. tests	Continuous parameter - mean (m)	Compliance parameters	
EN 13823	FIGRA _{0.2MJ}	1, 5	62.95, 102.46	Compliant	
	THR _{600s}		2.93, 4.16	Compliant	
	LFS		N, N	Compliant	
	SMOGRA		107.00, 129.80	Compliant	
	TSP _{600s}		336.66, 519.15	Compliant	
EN ISO 11925-2	F _s	6	35	Compliant	
(15s exposure – surface)	Flaming droplets/ particles		None	Compliant	
EN ISO 11925-2	F _s	6	20	Compliant	
(15s exposure – edge)	Flaming droplets/ particles		None	Compliant	



4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 10 of EN 13501-1:2002

4.2 Classification

The product, a flame retardant grade, PVCu material that is utilised in the production of the Gradus Inpro range of wallguards, handrails, bed protectors and corner guards, in relation to its reaction to fire behaviour is classified:

В

The additional classification in relation to smoke production is:

s3

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

d0

The format of the reaction to fire classification for construction products excluding floorings is:

Fire Behaviour		Smoke Production			Flaming Droplets	
В	-	s	3	,	d	0

i.e. B - s3, d0

Reaction to fire classification: B - s3, d0

4.3 Field of application

This classification is valid for the following end use applications:

i) Installed with or without an air gap, over any substrate having a minimum thickness of 6mm and a density equal to or greater than 800kg/m³, with a fire performance of A2 or better.



This classification is also valid for the following product parameters:

Product colour	No variation allowed
Product density	No variation allowed
Product thickness	No variation allowed
Product formulation	No variation allowed

SIGNED	APPROVED
L.S.Hill	Sand Namel

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