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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:

"PALOPAQUE LS" "PALOPAQUE HYG LS" **Report No:** 

321611

Issue No:

2

## Prepared for:

Palram Europe Limited Unit 2 Doncaster Carr Industrial Estate White Rose Way Doncaster DN4 5JH

#### Date:

23<sup>rd</sup> August 2012

## 1. Introduction

This classification report defines the classification assigned to "PALOPAQUE LS" "PALOPAQUE HYG LS", a flat un-plasticised rigid polyvinyl chloride (PVC) sheet, in line with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

## 2.1 General

The product, "PALOPAQUE LS" "PALOPAQUE HYG LS", a flat un-plasticised rigid polyvinyl chloride (PVC) sheet, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

## 2.2 Product description

The product, "PALOPAQUE LS" "PALOPAQUE HYG LS", a flat un-plasticised rigid polyvinyl chloride (PVC) sheet is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	A flat un-plasticised rigid polyvinyl chloride (PVC) sheet
Product reference	"PALOPAQUE LS" "PALOPAQUE HYG LS"
Name of manufacturer	Palram DPL Limited (part of the Palram group)
Thickness	2.5mm (stated by sponsor)
	2.53mm (determined by Exova Warringtonfire)
Density	1.4g/cm <sup>3</sup> (stated by sponsor)
	1.45g/cm <sup>3</sup> (determined by Exova Warringtonfire)
Colour	"White"
Flame retardant details	See Note 1 below
Brief description of	Sheet extrusion
manufacturing process	
Mounting and fixing details	The specimens were tested clamped into a "window" frame
	manufactured from 5mm steel sheet. A one piece, 'L' shaped
	frame was placed into the test position with the product butted
	up behind it. A rectangular shaped frame was then butted up
	behind each wall of the sample and clamped into place at the
	top and bottom. 5mm thick steel angle (40mm x 40mm) was
	placed along the full length of the unexposed edge of the corner
	joint and clamped into position to secure it utilising bars at the
	top and bottom of the angle, each extending 200mm along each
	wing such that each could be retained by the clamps nearest to
	the corner joint.
Air space details	A 180mm ventilated cavity was situated between the reverse
	face of each specimen and the calcium silicate based backing
	board (as defined in EN 13238: 2010)

# Note 1. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product

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

## 3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova Warringtonfire	Palram Europe Limited	WF 320819	EN ISO 11925-2
Exova Warringtonfire	Palram Europe Limited	WF 320820	EN 13823

## 3.2 Test results

Test method &			Results		
test number	test number Parameter		Continuous parameter - mean (m)	Compliance parameters	
EN ISO 11925-2	Fs	6	42.5	Compliant	
(30s exposure - surface)	Flaming droplets/ particles	0	None	Compliant	
EN ISO 11925-2	Fs	,	31.7	Compliant	
(30s exposure – edge)	Flaming droplets/ particles	0	None	Compliant	
EN 13823	FIGRA <sub>0.2MJ</sub>		76.42	Compliant	
	FIGRA <sub>0.4 MJ</sub>	GRA <sub>0.4 MJ</sub>		Compliant	
	THR 600s	2	2.69	Compliant	
	LFS	3	None	Compliant	
	SMOGRA		41.11	Compliant	
	TSP <sub>600s</sub>		144.59	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, "PALOPAQUE LS" "PALOPAQUE HYG LS", a flat un-plasticised rigid polyvinyl chloride (PVC) sheet, in relation to its reaction to fire behaviour is classified:

В

The additional classification in relation to smoke production is:

#### s2

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	2	I	d	0

i.e. B – s2 , d0

## Reaction to fire classification: B – s2, d0

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## 4.3 Field of application

This classification is valid for the following end use applications:

i) Construction applications mechanically installed with a minimum air gap of 180mm.

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product density	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed
Product colour	No variation allowed

## 5. Limitations

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

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**APPROVED** 

Mennell

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Matthew Dale Certification Engineer Technical Department

Janet Murrell Technical Manager Technical Department on behalf of Exova Warringtonfire

Issue 2: 14<sup>th</sup> August 2013

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