

CLASSIFICATION OF REACTION TO FIRE IN ACCORDANCE WITH EN 13501-1:2007

Sponsor: *Polygal Plastics Industries Ltd., Kibbutz Gazit 1934000, Israel*

Prepared by: *„Center for Testing and European Certification“ LTD
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Notified body №: *1871*

Product name: *Polygal polycarbonate multiwall sheets*

Classification report №: *1871-CPR-RtF-349*

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



1 Introduction

This classification report defines the classification assigned to *Polygal polycarbonate multiwall sheets* in line with the procedures given in EN 13501-1:2007+A1:2009

2 Details of classified product

2.1 General

The product, *Polygal polycarbonate multiwall sheets* is defined as transmitting flat multiwall polycarbonate (PC) sheets for internal and external use in walls, roofs and ceilings in accordance with EN 16153. The product is manufactured from: Polygal Plastics Industries Ltd., Kibbutz Gazit 1934000, Israel; Panchim, Stara Zagora, Bulgaria; Polygal Vostok, Kurovskoe, Russia; Polygal Inc, Charlotte NC, USA; Polygal Sud, Casa Blanca, Chile

2.2 Product description

The product, *Polygal polycarbonate multiwall sheets* is described below and in the test report provided in support of classification listed in clause 3.1.

Product description:

The product Polygal polycarbonate multiwall sheets is a flat extruded PC sheet with two parallel outside walls and internal parallel walls and with symmetrical in-plan cross-section. The sheets are made with 2-7 layers, covered with UV absorber. The tested samples were with 4 mm and 32 mm thicknesses, colors – ice, bronze and clear and thicknesses 800 kg/m² and 3800 kg/m².

3 Test reports and test results in support of classification.

3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports	Test method / extended application rules & date
CONSTRUCTION PRODUCTS TESTING LABORATORY CTEC LTD Stara Zagora, Bulgaria	Polygal Plastics Industries Ltd., Israel	1420599/27.05.2019	BDS EN ISO 11925-2:2011
CONSTRUCTION PRODUCTS TESTING LABORATORY CTEC LTD Stara Zagora, Bulgaria	Polygal Plastics Industries Ltd., Israel	1420598/27.05.2019	BDS EN 13823:2010+A1:2015



3.2 Test results

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
<i>BDS EN ISO 11925-2:2011</i> (30s exposure surface) For samples with 32 mm thickness and color ice	F _s	6	Nil	Compliant
	flaming droplets/particles		None	
<i>BDS EN 13823:2010+A1:2015</i> For sample with 4mm thickness and color ice	FIGRA 0.2MJ	1	4.8	Compliant
	LFS		(-)	
	THR 600s		0.2	Compliant
	SMOGRA		1.1	
	TSP _{600s}		14.0	
<i>BDS EN 13823:2010+A1:2015</i> For samples with 4 mm thickness and color bronze	flaming droplets/particles	1	No	Compliant
	FIGRA 0.2MJ		26.6	Compliant
	LFS		(-)	
	THR 600s		1.1	Compliant
	SMOGRA		0.0	
<i>BDS EN 13823:2010+A1:2015</i> For samples with 32 mm thickness and color bronze	TSP _{600s}	1	19.2	Compliant
	flaming droplets/particles		No	
	FIGRA 0.2MJ		43.6	Compliant
	LFS		(-)	
	THR 600s		4.3	Compliant
<i>BDS EN 13823:2010+A1:2015</i> For samples with 32 mm thickness and color clear	SMOGRA	1	12.5	
	TSP _{600s}		130.0	Compliant
	flaming droplets/particles		No	
	FIGRA 0.2MJ		57.7	Compliant
	LFS		(-)	
<i>BDS EN 13823:2010+A1:2015</i> For samples with 32 mm thickness and color clear	THR 600s	1	5.8	Compliant
	SMOGRA		17.9	
	TSP _{600s}		141.6	Compliant
<i>BDS EN 13823:2010+A1:2015</i> For samples with 32 mm thickness and color clear	flaming droplets/particles	1	No	
	flaming droplets/particles		No	Compliant



BDS EN 13823:2010+A1:2015 For samples with 4 mm thickness and color clear	FIGRA 0.2MJ LFS THR _{600s}	1	0.0 (-) 0.1	Compliant
	SMOGRA TSP _{600s}		0.0 21.2	Compliant
	flaming droplets/particles		No	Compliant
BDS EN 13823:2010+A1:2015 For samples with 32 mm thickness and color ice	FIGRA 0.2MJ LFS THR _{600s}	3	56.7 (-) 5.4	Compliant
	SMOGRA TSP _{600s}		28.9 261.1	Compliant
	flaming droplets/particles		No	Compliant

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with BDS EN 13501-1:2007+A1:2009.

4.2 Classification

The product, *Polygal polycarbonate multiwall sheets* in relation to its reaction to fire behaviour is classified:

B

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 and products for thermal insulation of pipes is:

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

Reaction to fire classification: B – s3, d0



07546

4.3 Field of application

This classification is valid for the following end use conditions:

Polygal polycarbonate multiwall sheets are used for internal and external walls, roofs and ceilings.

This classification is valid for the following product parameters:

- Thickness: from 4 mm to 32 mm
- Density: from 800 kg/m² to 3800 kg/m²
- Type of cover – UV absorber
- Composition of components - not allowed amendment
- Colour – any colours

5 Limitations

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

The classification assigned to the product in this report is appropriate to a declaration of performance by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Regulation (EU) No 305/2011.


The manufacturer has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence, the manufacturer has concluded that system 3 attestation is appropriate.

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 claimed to be relevant to the samples tested and that will provide for their traceability

SIGNED:


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Specialist testing and quality

APPROVED:


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on behalf of: **CTEC LTD**

