



Laboratory for Fire Safety

Classification of reaction to fire in accordance with EN 13501-1:2018 of Verosol SilverScreen 203

Classification report

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Classification report

client Verosol Fabrics B.V.
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notified body no. NB 2264



product name **Verosol SilverScreen 203**

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date 18 November 2019
reference JM/NvD//YA 2174-4E-RA-001
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1 Introduction

On behalf of Verosol Fabrics B.V. an investigation was performed with respect to the reaction to fire properties of Verosol SilverScreen 203.

This classification report defines the reaction to fire classification of the product in accordance with the procedures described in EN 13501-1: 2018.



For this type of measurements the Laboratory for Fire safety has been accredited by the Dutch "Raad voor Accreditatie" (RvA).

The RvA is member of EA MLA (**EA MLA: European Accreditation Organisation MultiLateral Agreement**: <http://www.european-accreditation.org>).

EA: "Certificates and reports issued by bodies accredited by MLA and MRA members are considered to have the same degree of credibility, and are accepted in MLA and MRA countries."

2 Product description

2.1 General

The information in this chapter is based on information provided by the client.

The product investigated is Verosol SilverScreen 203, hereinafter also called 'the product'. The intended application is for use as blinds for internal applications. The materials to be tested were delivered on the date specified in Table 2.1. On arrival the material was verified and marked by Peutz.

2.2 Harmonised product standard

At the time of testing, there was no relevant European product standard for the reaction to fire properties. The classification has been carried out in accordance with clause 11 of EN 13501-1:2007+ A1:2009.

2.3 Product identification

The most important parameters for identifying the product are summarized in Tables 2.1 and 2.2 below.

t2.1 General information of product to be tested

Product	Verosol SilverScreen 203
Date of delivery	23 August 2019
Commercial name	Verosol SilverScreen 203
Produced by	Verosol Fabrics B.V. te Eibergen Kieftte 18 7151 HZ Eibergen Netherlands
Identification	
Batchnumber	FD02 35 203 999 003 2280 (beige)
Date of manufacture	14 August 2019
Sampling	
Date of sampling	19 August 2019
Sampling by	R. Kuipers at VF Production

Peutz was not involved in the selection of the test specimen (or of its materials). The laboratory cannot make any declaration about the representativeness of the provided specimen and the samples made available.

t2.2 Additional information of product to be tested

Product	Verosol SilverScreen 203
Description	Fabric of PVC coated PET yarns, metallized
Thickness	0.58 mm
Density	780 kg/m ³
Weight	450 g/m ²
Fire retardant additive	Yes; Antimony trioxide
Amount of fire retardants (%)	0,5 % – 5 %
Colour	Beige with metallized backside
Organic content of the colours	50 %
Content of organic colours in the product	0-1 % (w/w)
Orientation	Warp direction upwards (machine direction)

The values mentioned are the nominal values as given by the client, unless otherwise stated (MV, measured value).

3 Reports and results in support of this classification

3.1 Reports

The client has confirmed that the reports provided (see Table 3.1) may be used for this classification.

t3.1 Reports in support of classification

Name of laboratory	Name of client	Number and date of report	Test method field of application rules
Peutz bv	Verosol Fabrics B.V.	YA 2174-2E-RA-001, 18-11-2019	EN 13823:2010+A1:2014
Peutz bv	Verosol Fabrics B.V.	YA 2174-3E-RA-001, 18-11-2019	EN-ISO 11925-2:2010

3.2 Results

The results obtained are summarised in Tables 3.2 and 3.3.

t3.2 Summary of test results EN-ISO 11925-2

Flame application time 30 s		Number of tests	Max. flame height	Results
Parameter	Compliance parameters			
– Surface exposure	F _s ≤ 150 mm	6	140	Y
Beige	Ignition of filter paper			N
– Edge exposure	F _s ≤ 150 mm	6	140	Y
Beige	Ignition of filter paper			N

t3.3 Summary of test results EN 13823

Parameter		Test 1 Beige	Test 2 Beige	Test 3 Beige
THR _{600s}	[MJ]	0.47	0.54	0.36
FIGRA _{0,2MJ}	[W/s]	0.0	0.0	0.0
FIGRA _{0,4MJ}	[W/s]	0.0	0.0	0.0
TSP _{600s}	[m ²]	55.0	56.1	54.4
SMOGRA	[m ² /s ²]	46.8	46.8	50.0
LFS<edge	[Y/N]	N	N	N
FDP ≤ 10 s	[Y/N]	N	N	N
FDP > 10 s	[Y/N]	N	N	N

3.3 Test results for classification

t3.4 Summary of test results EN-ISO 11925-2 for classification

Flame application time 30 s		Number of tests	Results	
			Continuous parameters (average)	Compliance parameters
– Surface exposure	Fs ≤ 150 mm	6	-	Y
	Ignition of filter paper		-	N
– Edge exposure	Fs ≤ 150 mm	6	-	Y
	Ignition of filter paper		-	N

t3.5 Summary of test results EN 13823 for classification

Parameter		Number of tests	Resultaat	
			Continuous parameters (average)	Compliance parameters
– FIGRA _{0,2MJ}	[W/s]	3	0.5	-
– FIGRA _{0,4MJ}	[W/s]		0	-
– THR _{600s}	[MJ]		0	-
– SMOGRA	[m ² /s ²]		55	-
– TSP _{600s}	[m ²]		48	-
– LFS reaching edge			-	N
– Flaming droplets/particles			-	N
– FDP ≤ 10 s			-	N
– FDP > 10 s				

3.4 Classification criteria

The classification to be obtained is based on the classification criteria given in EN 13501-1. In Tables 3.6 and 3.7 these criteria are summarised.

t3.6 Classification criteria

Test	Parameter Continuous (average) or compliance	Class				
		B	C	D	E	F
EN-ISO 11925-2	Flame spread \leq 150 mm	Y	Y	Y	Y	N
EN 13823	FIGRA _{0,2MJ}	[W/s] \leq 120	-	-	-	-
	FIGRA _{0,4MJ}	[W/s] -	\leq 250	\leq 750	-	-
	THR _{600s}	[MJ] \leq 7,5	\leq 15	-	-	-
	LFS reaching edge	N	N	-	-	-

t3.7 Criteria additional classifications

Test	Parameter Continuous (average) or compliance	Class			Class		
		s1	s2	s3	d0	d1	d2
EN-ISO 11925-2	Ignition of filter paper <i>Note: ignition of filter paper leads to classification d2, irrespective of the results for FDP in EN 13823</i>	-	-	-	N	N	Y
EN 13823	SMOGRA	[m ² /s ²] \leq 30	\leq 180	not s1	-	-	-
	TSP _{600s}	[m ²] \leq 50	\leq 200	or s2	-	-	-
EN 13823	Flaming droplets/particles (FDP) within 600 s						
	- FDP \leq 10 s	-	-	-	N	Y	-
	- FDP $>$ 10 s	-	-	-	N	N	not d0 or d1

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The product, Verosol SilverScreen 203, has been classified to its reaction to fire behaviour as: B. The additional classification for the smoke production is: s2, the additional classification for flaming droplets is: d0.

Reaction to fire classification: B-s2, d0

4.3 Field of application

The classification is valid for the product parameters and end use applications as stated in Tables 4.1 and 4.2.

t4.1 Product parameters

Parameter	
Thickness	0.58 mm
Surface weight	450 g/m ²
Density	780 kg/m ³
Fire retardant utilised	Yes
Amount of fire retardants (%)	0,5 % – 5 %
Colour	FD02 Beige
Other	No changes in composition

t4.2 End use parameters


Parameter	
Substrate	Free standing and with a ventilated cavity
Cavity	Ventilated
Joints	No joints
Orientation	Warp direction upwards (machine direction)
Other	Use as freehanging blinds for internal applications

5 Limitations

There are no limits in time on the validity of this classification document.

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

Mook,



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Head of Laboratory for For Fire Testing



D.J. Den Boer, BEng
Management

This report contains 11 pages