

Laboratory for Fire Safety

Classification of reaction to fire in accordance with EN_13501-1:2018 of Verosol SilverScreen 202/205

Classification report



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Client

Kvadrat High Performance Textiles B.V. Kiefte 18 7151 HZ Eibergen The Netherlands

Issued by Peutz bv Lindenlaan 41 NL-6584 AC Molenhoek PO Box 66 NL-6585 ZH Mook The Netherlands



Notified body no. NB 2264

Product name Verosol SilverScreen 202/205

Report numberYC 2174-5E-RA-001Date19 June 2023ReferenceNvD/DDe//YC 2174-5E-RA-001Representativeing. N.F. van DijkAuthorBSc D.M. Dechering085 8228 697d.dechering@peutz.nl

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1 Introduction

On behalf of Kvadrat High Performance Textiles B.V. an investigation was performed with respect to the reaction to fire properties of Verosol SilverScreen 202/205.

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**: **E**uropean **A**ccreditation Organisation **M**ulti**L**ateral **A**greement: 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 report is based on information provided by the client.

The product investigated is Verosol SilverScreen 202/205, hereinafter also called 'the product'. The intended application is for use as blinds for interior application.

2.2 Harmonised product standard

According to the client there was no harmonised European product standard published at the time the tests were conducted and this report was drawn up.

2.3 Product identification

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

Product Verosol SilverScreen 202/205 Date of delivery 3 February 2023 Commercial name Verosol SilverScreen 202/205 Kvadrat High Performance Textiles B.V. Produced by Kiefte 18 7151 HZ Eibergen The Netherlands Identification batchnr. EB01 Black (011) - B041405 EB03 Bronze (013) - B040266 ED02 Beige (032) - B041452 December 2022 – January 2023 date of manufacture Sampling date 27 January 2023 Sampling by **R. Kuipers** Kvadrat High Performance Textiles B.V.

t2.1 General information of product to be tested

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. The results apply to the sample as received.



t2.2 Additional information of product tested

Product	Verosol SilverScreen 202/205			
	Nominal value			
Description	Glassfibre – PVC fabric with a metallic backside			
Composition	64% PVC / 36% Glass			
Thickness	0.49 mm			
Surface weight	400 g/m ²			
Fire retardant additive	0% - 5% Sb ₂ O ₃			
Colour	EB01 Black (011) – RAL 9011			
	EB03 Bronze (013) – RAL 8014			
	ED02 Beige (032) – RAL 9001			

The values mentioned are the nominal values as given by the client, unless otherwise stated



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	Name of client	Number and date of report	Test method Field of application rules	
laboratory			Field of application rules	
Peutz bv, NB 2264	Kvadrat High Performance Textiles B.V.	YC 2174-4E-RA; 19 June 2023	EN 13823:2020+A1:2022	
Peutz bv, NB 2264	Kvadrat High Performance Textiles B.V.	YC 2174-3E-RA; 19 June 2023	EN-ISO 11925-2:2020	

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			Results		
	Parameter	Number of tests	Continuous parameters (average)	Compliance parameters	
Surface exposure	$Fs \le 150 \text{ mm}$	(-	Y	
	Ignition of filter paper	6	-	Ν	
Edge exposure	$Fs \le 150 \text{ mm}$	6	-	Y	
	Ignition of filter paper		-	Ν	

t3.3 Summary of test results EN 13823

			Results			
Parameter		Number of tests	Continuous parameters (average)	Compliance parameters		
FIGRA _{0,2MJ}	[W/s]	3	345	-		
FIGRA _{0,4MJ}	[W/s]		0	-		
THR _{600s}	[MJ]		0.6	-		
SMOGRA	$[m^2/s^2]$		1694	-		
TSP _{600s}	[m ²]		93	-		
LFS reaching edge			-	Ν		
Flaming droplets/particles						
- FDP ≤ 10 s			-	Ν		
– FDP > 10 s			-	Ν		



3.3 Classification criteria

The classification to be obtained is based on the classification criteria given in EN 13501-1. In Tables 3.4 and 3.5 these criteria are summarised.

t3.4 Classification criteria

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

t3.5 Criteria additional classifications

Test	Parameter		Class			Class		
	Continuous (average) or compliance		s1	s2	s3	d0	d1	d2
EN-ISO 11925-2	Ignition of filter paper		-	-	-	Ν	Ν	Y
	Note: ignition of filter paper leads to cla	ssification d	2, irrespecti	ive of the resul	ts for FDP in EN	l 13823		
EN 13823	SMOGRA	[m²/s²]	≤ 30	≤ 180	not s1	-	-	-
	TSP _{600s}	[m ²]	≤ 50	≤ 200	or s2	-	-	-
EN 13823	Flaming droplets/particles							
	(FDP) within 600 s							
	- FDP ≤ 10 s		-	-	-	Ν	Y	-
	– FDP > 10 s		-	-	-	Ν	Ν	not d
								or d1

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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 202/205, has been classified to its reaction to fire behaviour as: C. The additional classification for the smoke production is: s3, the additional classification for flaming droplets is: d0.

Reaction to fire classification: C-s3, 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	0.49 mm
Surface weight	400 g/m ²
Fire retardants (%)	0% - 5% Sb ₂ O ₃
Colours	EB01 Black (011) – RAL ???
	EB03 Bronze (013) – RAL ???
	ED02 Beige (032) – RAL ???

t4.2 End use parameters

Parameter		
Substrate	Not applicable (free standing)	
Cavity	Ventilated	
Method of attachment	Free hanging	
Joints	No joints can be used	
Orientation	Warp direction upwards (machine direction)	
Other	Use as free hanging blinds for interior 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.

H.H.A. Leenders, BSc. Head of Laboratory for For Fire Testing

This report contains 10 pages and 1 appendix: Appendix 1 Colour range Mook,

D.J. den Boer, BSc. Management

(1 page)



Appendix 1 Colour range

Colour range:

Zwart



Donkerbeige

EB03 Brons

ED03

Lichtgrijs



EC02 Staalgrijs