

TFI Report 440747-12

Classification

of the Reaction to Fire according to EN 13501-1:2010

Customer

DLW Flooring GmbH Stuttgarter Str. 75 74321 Bietigheim-Bissingen GERMANY

resilient floor covering

Product

Product 1: Meditone PUR Product 2: Favorite PUR Product 3: Medintech PUR Product 4: Favorite Class 3 Product 5: Favorite R 10 PUR Product 6: Opalon PUR Product 7: Favorite PUR with Sanitized®

Responsible at TFI

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without autograph signature.

This report includes 7 pages and 0 annex(es). This report is a translation of test report no. 440747-11.

Aachen, 04 April 2016



Dr. Ernst Schröder The present document is provided with a qualified electronic signature and is valid

This report only applies to the tested samples and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the TFI Aachen GmbH, also with regard to the order execution.



Testing laboratory, inspection and certification body recognised by the DIBt (Deutsches Institut für Bautechn



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1 Transaction

Test order	Classification of the reaction to fire according to EN 13501-1:2010			
Order date	16 May 2014, 22 January 2016, 18 February 2016, 01 April 2016			
Your reference	4503570311			
Product designation(s)	Product 1: Meditone PUR			
	Product 2: Favorite PUR			
	Product 3: Medintech PUR			
	Product 4: Favorite Class 3			
	Product 5: Favorite R 10 PUR			
	Product 6: Opalon PUR			
	Product 7: Favorite PUR with Sanitized®			
TFI sample number	13-03-0238, 13-03-0238-01, 13-09-0109, 14-05-0120, 14-05-0120-01, 16-01-0196, 16-02-0185, 16-02-0185-01			

2 Product specification

The construction products are completely described in the test reports mentioned under item 3 and in the corresponding Annexes KT. The test reports provide the basis for the present classification.



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3 Results

3.1 Test reports and test results used for the classification

Test laboratory	Customer	Test report no.	Test method
Taytilas & Electing		420500.02	EN ISO 9239-1:2010
Textiles & Flooring Institute GmbH	Armstrong DLW GmbH	430506-03 dated 08 May 2013	EN ISO 11925-2:2010 (15 s ignition time)
Textiles & Flooring	Textiles & Flooring		EN ISO 9239-1:2010
Institute GmbH	Armstrong DLW GmbH	W GmbH 431445-01 dated 01 October 2013	-
Textiles & Flooring	Armstrong DLW GmbH	440747-03 dated 24 June 2014	EN ISO 9239-1:2010
Institute GmbH			-
Textiles & Flooring DUW Flooring Cash I 46		460116-02	EN ISO 9239-1:2010
Institute GmbH			-
		460295-04	EN ISO 9239-1:2010
TFI Aachen GmbH	DLW Flooring GmbH	dated 04 April 2016	-



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3.2 Test results

	Test method	Parameter	Number of tests	Result	
				Mean value	Requirements fulfilled (Y/N)
		Average critical heat flux [kW/m²]	3	≥ 11.0	
EN ISO 9239-1:2010	Integrated smoke value [% x min.]	3	63		
Pro	EN ISO 11925-2:2010	Flame tip < 150 mm	6	-	Y

— Test n	Testuration	Parameter	Number of tests	Result	
	Test method			Value*	Requirements fulfilled (Y/N)
	EN ISO 9239-1:2010	Average critical heat flux [kW/m²]	2	≥ 11.0	
Product 4		Integrated smoke value [% x min.]		54	
Pro	EN ISO 11925-2:2010	Flame tip < 150 mm	-	-	-

*Worse result for the average critical heat flux and the corresponding integrated smoke value from the Radiant Panel Test with a reduced number of samples.



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— Test method			Number of	Result	
	Parameter	tests	Value*	Requirements fulfilled (Y/N)	
	EN 100 0000 4 0040	Average critical heat flux [kW/m²]		≥ 11,0	
EN ISO 9239-1:2010	Integrated smoke value [% x min.]	2	137		
Pro	EN ISO 11925-2:2010	Flame tip < 150 mm	-	-	-

*Worse result for the average critical heat flux and the corresponding integrated smoke value from the Radiant Panel Test with a reduced number of samples.

	Test method	Parameter	Number of tests	Result	
				Value*	Requirements fulfilled (Y/N)
EN ISO 9239-1:20	EN ISO 0230 1-2010	Average critical heat flux [kW/m²]	2	≥ 11,0	
	EN 150 9239-1.2010	Integrated smoke value [% x min.]		181	
Pro	EN ISO 11925-2:2010	Flame tip < 150 mm	-	-	-

*Worse result for the average critical heat flux and the corresponding integrated smoke value from the Radiant Panel Test with a reduced number of samples.



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3.3 Classification and field of application

The construction products "Meditone PUR", "Favorite PUR", "Medintech PUR", "Favorite Class 3", "Favorite R 10 PUR" "Opalon PUR" and "Favorite PUR with Sanitized[®]" are classified as follows with regard to the reaction to fire:

 \mathbf{B}_{fl}

The additional classification with regard to the smoke development is:

s1

The additional classification with regard to burning droplets/particles is:

The format of the reaction to fire classification for floor coverings is:

Reaction to fire		Smoke de	velopment
B _{fi}	-	S	1

Classification of the reaction to fire: $B_{\rm fl}\mbox{-}\mbox{s1}$

This classification is valid for the following end use application:

Type of end use application	horizontally laid floor covering
Substrate	noncombustible substrates (Euroclass A1 and A2-s1,d0) with a gross density \geq 1350 kg/m ³
Underlay for installation	no
Type of fixation	glued
Adhesive	glued with adhesive UZIN KE 2000 S, Uzin Utz AG (or adhesives which ensure that the tested construction product will reach at least the same fire class)
Joint according to EN ISO 9239-1:2010	no

Limitations

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

The classification assigned to the construction product in this report is suited for a declaration of conformity by the manufacturer or a Declaration of Performance within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive or Construction Products Regulation.

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HRB 8157 Aachen VAT No. DE209411312 Managing Director Dr. Ernst Schröder

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The manufacturer has made a declaration, which is held on file. This declaration confirms that the design of the product does not require any specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic contents 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 for the attestation of conformity respectively system 3 for the assessment and verification of the constancy of performance is appropriate

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.



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