

Institute of Building Materials, Concrete Construction Testing Institute and Fire Protection

Braunschweig Civil

# **CLASSIFICATION OF REACTION TO FIRE** BASED ON DIN EN 13501-1:2010-01

- Translation -

NO. Of Glassification Report	lassification Rep	ort:
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K-2300/949/16-MPA BS

Client: YSHIELD GmbH & Co. KG

Am Schulplatz 2

94099 Ruhstorf

Issued by: Materialprüfanstalt für das Bauwesen

Beethovenstraße 52

38106 Braunschweig

**Notified body No.:** 0761-CPD

Prodcut: Shielding paint

Product designation: "YSHIELD sheilding paint HSF54"

Issue No.: 1<sup>st</sup> issue

Date of issue: 20/02/2017

Validity: not restricted

This Classification Report consists of 6 pages

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#### 1 Introduction

This Classification Report describes the classification that is assigned to the construction product "YSHIELD sheilding paint HSF54"\* on the basis of the method specified in DIN EN 13501-1:2010-01.

### 2 Details of the classified product

### 2.1 Type and application

The construction product "YSHIELD shellding paint HSF54"\* is an acrylic coating which is used as primer which is coated with a standard dispersion paint.

### 2.2 Description

The construction product "YSHIELD sheilding paint HSF54"\* is described in detail in the Test Reports that are listed in section 3.1 below and on which this classification is based.

## 3 Test report and results as the basis for the classification

### 3.1 Reports

Name of testing laboratory	Client	Report No.	Test method and date	
MPA Braunschweig	YSHIELD GmbH & Co. KG Am Schulplatz 2	2300/949/16-a - Sta of 20/02/2017	DIN EN ISO 11925-2:2011-02	
	eig 94099 Ruhstorf	2300/949/16-b - Sta of 20/02/2017	DIN EN 13823: 2015-02	

<sup>\*</sup> Specifications provided by the manufacturer



# 3.2 Results for the product "YSHIELD sheilding paint HSF54"\*

			Ergebnisse		
Test method	Parameter	No. Of tests	Continuous Parameters Mean values (m)	Compliance Parameters	
DIN EN 13823	FIGRA <sub>0,2 MJ</sub>		30,3 <sup>1)</sup>		
	FIGRA <sub>0,4 MJ</sub>		O, O <sup>1)</sup>	<b></b>	
	THR <sub>600s</sub> [MJ]		0,571)		
	LFS < Edge		no <sup>1)</sup>	compliance	
	SMOGRA [m²/s²]		0,01)		
	TSP <sub>600s</sub> [m²]		9,9 <sup>1)</sup>		
	Burning debris / droplets		no <sup>1)</sup>	compliance	
DIN EN ISO 11925-2					
Surface flame attack 30 s	Fs ≤ 150 mm	0		compliance	
Burning debris / droplets	Ignition of filter paper	6		compliance	
Edge flame attack 30 s	Fs ≤ 150 mm	6		compliance	
Burning debris / droplets	Ignition of filter paper	0		compliance	

<sup>\*</sup> Specifications provided by the manufacturer



## 4 Classification and field of direct application

### 4.1 Reference of classification

This classification has been carried out in accordance with DIN EN 13501-1:2010-01.

### 4.2 Classification

The construction product "YSHIELD sheilding paint HSF54"\* in relation to its fire behaviour is classified:

B

The additional classification in relation to smoke production is:

**s1** 

The additional classification in relation to burning debris / droplets is:

d0

The classification format for the reaction to fire for construction products except for floorings, pipe insulation is:

Fire behaviour	Smoke production		burning debris / droplets		
В	 S	1		d	0

Classification of reaction to fire: B-s1, d0

<sup>\*</sup> Classification of reaction to fire



## 4.3 Field of application

This classification covers the following product parameter

Product	Parameter	Validity range of the classification		
YSHIELD sheilding paint HSF54*	Application rate (wet)	165 g/m² mm ± 15,0 g/m²		
	Density	1440 kg/m³ ± 140 kg/m³		
	Colour	black		
	Туре	Dispersion paint		
Top layer	Application rate	200 g/m² ± 20,0 g/m²		
	Density	1270 kg/m³ ± 120 kg/m³		
	Colour	white		
Substrate Type		Gypsum boards as well as substrate with reaction to fire class A1 and A2-s1,d0 with a density ≥ 450 kg/m³ and thickness ≥ 12,0 mm in accordance to the regulate referred to DIN 13238:2010, section 5.3.2.1 and 5.3.2.2, 5.3.2.4		
	Distance to other flat construction products	Direct application (≤ 0 mm), use only in conjunction with top layer		

End-use application:

-Paint to shield electromagnetic fields.\*

<sup>\*</sup>Specifications provided by the manufacturer



#### 5 Notes

- 5.1 The classification in section 4 only applies to the construction material described in section 2 above. When combined with other construction materials (e.g. other components, other weight per unit areas or other thicknesses), its reaction to a fire may be adversely influenced so that the above classification no longer applies. The reaction to fire of the construction material when combined with other materials or made from other components or with other thicknesses etc. has to be separately.
- 5.2 This Classification Report is not a type approval or product certification document, and it does not replace the approval that may be required under the German building law (State Government Building Regulations).

This document is the translated version of Test Report 2300/949/16 dated 20/02/2017 translated on 20/02/2017. The legally binding text is the aforementioned German Test Report.

Signature

N. Stachowski B. S Official in charge

Schweig

Confirmed

Head of Testing Laboratory