

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2018

Classification no.	2013-Efectis-R0165c[Rev.1]
Sponsor	Zingametall BV-SRL Rozenstraat 4 B-9810 NAZARETH BELGIUM
Product name	ZINGA coating on steel
Prepared by	Efectis Nederland BV
Notified body no.	1234
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1. INTRODUCTION

1.1 PRODUCT NAME

This classification report defines the classification assigned to **ZINGA coating on steel** in accordance with the procedures given in EN 13501-1:2018.

1.2 REVISION INFORMATION

This is a revised version of this report. This version supersedes all previous versions of this reports that are hereby withdrawn. Details on the changes can be found in the tables below.

Table 1.1: Revision information

Issue	Date of issue	Report no.
First issue	May 2013	2013-Efectis-R0165c
First revision	December 2021	2013-Efectis-R0165c[Rev.1]

1.2.1 First revision detailed information

Table 1.2: First revision information

Chapter of revision	Different sponsor name for classification
Reason of revision	Request from sponsor they are the producer of the product, Original COT in The Netherlands initiated the testing process in 2013
Chapter of revision	Chapter 1, 2, modification of the coating thickness and gap analysis
Reason of revision	Coating thickness range expanded with 2 x 60 µm and upgrade to new test standard
Consequences of revision	Wider range of coating
Chapter of revision	Chapter 3, addition of test standard and product standard
Reason of revision	Upgrade for new classification
Consequences of revision	New classification according 2018 version
Chapter of revision	Chapter 4, Wider field of application
Reason of revision	Different minimum thickness of coating and limitations on the period of validity
Consequences of revision	Extra field of application
Chapter of revision	Chapter 5, AVCP system 4

1.3 ASSESSMENT INFORMATION

Efectis compared the two versions of the EN 11925 standard and concluded that the results from the tests according to the EN 11925-2:2010 standard are still valid according to the EN 11925-2:2020 standard. Therefore, this report can be used for classification according to EN 13501-1:2018.

Efectis compared the two versions of the EN 13823 standard and concluded that the results from the tests according to the EN 13823:2010 standard are still valid according to the EN 13823:2020 standard. Therefore, this report can be used for classification according to EN 13501-1:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **ZINGA coating on steel**, is defined as a coating on steel.

2.2 MANUFACTURER

Zingametall BV-SRL
Rozenstraat 4
B-9810 NAZARETH
BELGIUM

2.3 PRODUCT DESCRIPTION

Film Galvanising system on steel (0,8 mm $\pm$ 0.2 mm) with a thickness of 60 - 90 μ m.

3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2010/2020	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2010/2020	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
EN 13501-1:2018	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests

3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	COT BV THE NETHERLANDS	2013-Efectis-R0165a 2013-Efectis-R0165b	EN ISO 11925-2:2010 EN 13823:2010

3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2				
Surface flame impingement	Fs ≤150 mm	6	29	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	14	-
	Ignition of filter paper		-	Compliant

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
	FIGRA _{0.2MJ} [W/s]	3	0	-
	FIGRA _{0.4MJ} [W/s]		0	-
	THR _{600s} [MJ]		0.2	-
	LFS < edge		-	Compliant
	SMOGRA [m²/s²]		0.0	-
	TSP _{600s} [m²]		21	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Classification criteria			
Class Test method(s)	B	C	D
EN ISO 11925-2 Exposure = 30 s	F _s ≤ 150 mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
EN 13823	FIGRA _{0.2 MJ} ≤ 120 W/s LFS < edge of specimen THR _{600s} ≤ 7.5 MJ	FIGRA _{0.4 MJ} ≤ 250 W/s LFS < edge of specimen THR _{600s} ≤ 15 MJ	FIGRA _{0.4 MJ} ≤ 750 W/s
Additional classification			
Smoke production	s1 = SMOGRA ≤ 30 m ² /s ² and TSP _{600s} ≤ 50 m ² ; s2 = SMOGRA ≤ 180 m ² /s ² and TSP _{600s} ≤ 200 m ² ; s3 = not s1 or s2		
Flaming Droplets/particles	d0 = no flaming droplets/ particles in EN 13823 within 600 s; d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s; d2 = not d0 or d1.		

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

4.2 CLASSIFICATION

The product, **ZINGA coating on steel**, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: B – s1, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness range	2x 60 μm – 2 x 90 μm (120 – 180 μm)
Surface density	Coverage 0.65-0.97 kg/m ² (dry weight)
Other properties	Zinc content in dry layer >96%, Unlimited pot and shelf life, provides cathodic protection.

This classification is valid for the following end use applications:

Substrate	Non-combustible Steel sheet (thickness 0.8 mm $\pm$ 0.2 mm) (7850 $\pm$ 50 kg/m ³ , according to EN 13238:2010).
Application	Free standing
Methods and means of fixing	Roll or spraying
Joints	Not applicable
Other aspects of end use conditions	Closed surface, no openings or gaps between components.

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

Consult classification standard and national laws and regulations for limitations on the period of validity of the classification.

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 conformity by the manufacturer within the context of system 4 **Assessment and Verification of Consistency of Performance (AVCP)** and **CE marking** under the **Construction Products Regulation**.

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 4 AVCP 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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