

Classification of reaction to fire in accordance with EN 13501-1

1 Introduction

This classification report defines the classification assigned to product “Cetol WF 98xx” in accordance with the procedure given in EN 13501-1:2018.

2 Details of classified product

2.1 General

The product “Cetol WF 98xx” is defined as paint system for wooden panels. The classification is valid for the following end use application: Painted wooden panel.

According to the owner of this classification report, this product complies with the European product specification EN 14915.

2.2 Product description

The product, “Cetol WF 98xx”, is fully described in the test report provided in support of classification listed in Clause 3.1.

Table 1 Products.

Layer	Material	Paint amount (g/m ²)	Nominal dimensions (mm)	Nominal density (kg/m ³)
1 (top layer)	Cetol WF 98xx	2 x 100-120 (wet)	50-60 µm (dry)	-
2	Spruce	-	95 x 18	Approx. 470
3 (back)	Cetol WF 98xx	100-120 (wet)	25-30 µm (dry)	-

The paint is applied to the wood panels by spray application or brush application.

RISE Research Institutes of Sweden AB

Postal address
Box 857
501 15 BORÅS
SWEDEN

Office location
Brinellgatan 4
504 62 Borås
SWEDEN

Phone / Fax / E-mail
+46 10-516 50 00
+46 33-13 55 02
info@ri.se

This report may not be reproduced other than in full, except with the prior written approval of RISE Research Institutes of Sweden AB.

3 Report and results in support of this classification

3.1 Test report

Table 2 Test report forming the basis for this classification.

Name of laboratory	Name of sponsor	Test report reference no	Accredited test methods and date
RISE	Akzo Nobel Industrial Coatings AB	O100352-144390-6	EN 13823:2020 and EN ISO 11925-2:2020

3.2 Test results

The test results listed below show the worst case as found in the test programme performed and reported according to the table above. The tests have been carried out on a selection of colours according to EGOLF RECOMMENDATION 003-2016.

Table 3 Test results showing the worst case as found in the test program performed.

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean (m)	Compliance with parameters
EN ISO 11925-2		12		
Edge/Surface flame attack*				
30 s exposure	$F_s \leq 150$ mm		(-)	Compliant
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper
EN 13823		5		
	$FIGRA_{0,2MJ}$ (W/s)		666	Compliant
	$FIGRA_{0,4MJ}$ (W/s)		666	Compliant
	$LFS < \text{edge}$		(-)	Compliant
	THR_{600s} , (MJ)		15	Compliant
	$SMOGRA$, (m ² /s ²)		7.2	Compliant
	TSP_{600s} , (m ²)		51	Compliant
	Flaming droplets/particles		(-)	No flaming droplets/particles

* : as required to the end use application of the product

(-) : not applicable

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 11 and 15 of EN 13501-1:2018.

4.2 Classification

The product called “Cetol WF 98xx” in relation to its reaction to fire behaviour is classified:

D

The additional classification in relation to smoke production is:

s2

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

d0

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation product is:

Fire Behaviour		Smoke Production			Flaming Droplets	
D	-	s	2	,	d	0

Reaction to fire classification: *D-s2,d0*

4.3 Field of application:

This classification is valid for the following product parameters:

Product description, as specified in 2.2 in this report.

Colour range: all colours.

Nominal thickness of spruce panel: 18 mm.

Nominal density of spruce panel: 470 kg/m³.

This classification is valid for the following end use conditions:

Substrates:

- Wood based substrates at least 10 mm thick and any end use substrate of Euroclasses A1 or A2-s1,d0 at least 6 mm thick, having a density of ≥ 510 kg/m³.

Mounting:

- Vertically mounted wooden panels.

Fixings:

- Mechanically fixed.

Joints:

- Horizontal and vertical joints.

Void:

- Wood or metal scantlings creating a cavity ≥ 40 mm.

The sample was delivered by the client. RISE, Fire Technology was not involved in the sampling procedure.

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 3 of AVCP and CE marking under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products.

The manufacturer has made a declaration, which is held on file. This confirms that the products 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 3 attestation 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

RISE Research Institutes of Sweden AB **Department Fire Technology - Reaction to Fire Medium Scale Lab**

Performed by

Examined by

Richard Johansson

Per Thureson