

# **Laboratory for Fire Safety**

Classification of reaction to fire in accordance with EN\_13501-1:2018 of Bostik FP 402 Fireseal Silicone

Classification report



# **Laboratory for Fire Safety**

Classification of reaction to fire in accordance with EN\_13501-1:2018 of Bostik FP 402 Fireseal Silicone

# Classification report,

Client Bostik Benelux B.V.

Denariusstraat 11 4903 RC Oosterhout The Netherlands

Issued by Peutz bv

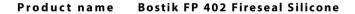
Lindenlaan 41

NL-6584 AC Molenhoek

Postbus 66

NL-6585 ZH Mook The Netherlands

Notified body no. NB 2264



Report number Y 2443-4E-RA-002

Date 27 October 2021 (replaces report Y 2443-4E-RA-001, 25-10-2021)

Reference HL/NvD//Y 2443-4E-RA-002
Representative ing. H.H.A. Leenders
Author ing. N.F. van Dijk

+31 858 228 636 n.vandijk@peutz.nl

This classification report consists of 10 pages and may only be used or reproduced in its entirety. This document is the original version and written in English.

peutz bv, postbus 66, 6585 zh mook, +31 85 822 86 00, mook@peutz.nl, www.peutz.nl kvk 12028033, opdrachten volgens DNR 2011, lid NLingenieurs, btw NL.004933837B01, ISO-9001:2015

mook – zoetermeer – groningen – düsseldorf – dortmund – berlijn – nürnberg – leuven – parijs – lyon







# Table of contents

1	Introduction	4
2	Product description	5
2.1	General	5
2.2	Harmonised product standard	5
2.3	Product identification	5
3	Reports and results in support of this classification	7
3.1	Reports	7
3.2	Results	7
3.3	Classification criteria	8
4	Classification and field of application	9
4.1	Reference of classification	9
4.2	Classification	9
4.3	Field of application	9
5	Limitations	10



### 1 Introduction

On behalf of Bostik Benelux B.V. an investigation was performed with respect to the reaction to fire properties of Bostik FP 402 Fireseal Silicone.

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 chapter is based on information provided by the client.

The product investigated is Bostik FP 402 Fireseal Silicone, hereinafter also called 'the product'. The product is defined as a linear joint seal.

#### 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.

#### t2.1 General information of product to be tested

Product	Bostik FP 402 Fireseal Silicone	
Date of sample arrival:	04-06-2021	
Name of the manufacturer:	Bostik Benelux B.V.	
Sampling done by:	W. Treffers	
Sampling date:	02-06-2021	
Identification of samples:	Table 2.2	



#### t2.2 Additional information of product to be tested

#### **Bostik FP 402 Fireseal Silicone**

Type of product Fire resistant silicone sealant

Description Bostik FP 402 Fireseal Silicone is a 1-component fire resistant

sealant based on silicone

Application For fire resistant sealing of joints in stony substrates

Manufacturer Bostik Benelux B.V., The Netherlands

 Product / EAN code
 30612845

 Batch no.
 21102121

 Colour
 White

 Weight [kg/m¹]
 1.24 g/ml

Specifications Cartridge 310 ml

Use of flame retardants No



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 values mentioned are the nominal values as given by the client, unless otherwise stated (MV, measured value).



# 3 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 laboratory	Name of client	Number and date of report	Test method	
			Field of application rules	
Peutz bv	Bostik Benelux B.V.	Y 2443-2E-RA-002; 27-10-2021	EN 13823:2020	
Peutz bv	Bostik Benelux B.V.	Y 2443-3E-RA-002; 27-10-2021	EN-ISO 11925-2:2010	

#### 3.2 Results

The results obtained are summarised in Tables 3.3 and 3.2.

#### t3.2 Summary of test results EN 13823

			Results			
Parameter		Number of tests	Continuous parameters (average)	Compliance parameters		
FIGRA <sub>0,2MJ</sub>	[W/s]		10	-		
FIGRA <sub>0,4MJ</sub>	[W/s]		10	-		
THR <sub>600s</sub>	[MJ]	3	1.6	-		
SMOGRA	$[m^2/s^2]$		2	-		
TSP <sub>600s</sub>	$[m^2]$		42	-		
LFS reaching edge			-	N		
Flaming droplets/particles						
- FDP ≤ 10 s			-	N		
- FDP > 10 s			-	N		



#### t3.3 Summary of test results EN-ISO 11925-2

Flame application time 30 s			Results		
Parameter		Number of tests	Continuous parameters (average)	Compliance parameters	
Edge exposure	Fs ≤ 150 mm	6	-	J	
	Ignition of filter paper	6	-	N	

#### 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 ≤ 150 mm		Υ	Υ	Υ		
EN 13823	FIGRA <sub>0,2MJ</sub>	[W/s]	≤ 120	-	-		
	FIGRA <sub>0,4MJ</sub>	[W/s]	-	≤ 250	≤ 750		
	THR <sub>600s</sub>	[MJ]	≤ 7,5	≤ 15	-		
	LFS reaching edge		N	N	-		

#### t3.5 Criteria additional classifications

Test	Parameter		Class			Class		
	Continuous (averag or compliance	je)	s1	s2	s3	d0	d1	d2
EN-ISO 11925-2	Ignition of filter paper		-	-	-	N	N	Υ
	Note: ignition of filter paper leads to classification d2, irrespective of the results for FDP in EN 13823							
EN 13823	SMOGRA	$[m^2/s^2]$	≤ 30	≤ 180	not s1	-	-	-
	TSP <sub>600s</sub>	[m²]	≤ 50	≤ 200	or s2	-	-	-
EN 13823	Flaming droplets/particles (FDP) within 600 s							
	- FDP ≤ $10 \text{ s}$		-	-	-	N	Υ	-
	- FDP > 10 s		-	-	-	N	N	not d0 or d1



## 4 Classification and field of application

#### 4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018 and EGOLF RECOMMENDATION 055-2019.

#### 4.2 Classification

The product, Bostik FP 402 Fireseal Silicone, has been classified to its reaction to fire behaviour as: B. The additional classification for the smoke production is: s1, the additional classification for flaming droplets is: d0.

## Reaction to fire classification: B-s1, d0

#### 4.3 Field of application

The classification is only valid for the product (Bostik FP 402 Fireseal Silicone) to be used for fire resistant sealing of joints in stony substrates

The classification is valid for the following end use applications:

- Bostik FP 402 Fireseal Silicone applied against non-combustible walls (A2-s1,d0 or better, e.g. concrete, masonry walls, excluding gypsum plasterboard), with a thickness of at least 9 mm and a density of at least 652.5 kg/m³;
- joint dimensions 20  $\times$  10 mm (width  $\times$  depth) and distance between parallel sealants 100 mm or greater.



## 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.

Mook,

H.H.A. Leenders, BSc.

Head of Laboratory for For Fire Testing

D.J. den Boer, BSc. Management

This report contains 10 pages