

REACTION TO FIRE – CLASSIFICATION REPORT No EUI-19-000052

1. INTRODUCTION

This classification report defines the classification assigned to a phenolic foam reference **Kooltherm K15** in accordance with the procedures given in EN 13501-1:2007 + A1:2009.

**REACTION TO FIRE CLASSIFICATION IN ACCORDANCE WITH
EN 13501-1:2007 + A1:2009**

Sponsor: Kingspan Insulation Ltd
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UNITED KINGDOM

Prepared by: EFFECTIS UK/Ireland

Notified Body No: 2822

Product name : **Kooltherm K15**

Classification report No.: EUI-19-000052

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2. DESCRIPTION OF THE PRODUCT

2.1. GENERAL

The product, **Kooltherm K15** is defined as a Thermal insulation product for buildings (BS EN 13166:2012+A2:2016).

2.2. PRODUCT DESCRIPTION

The product, **Kooltherm K15** is described below or is described in the reports provided in support of classification listed in 3.1.

Product description	
Trade mark	Kooltherm K15
Composition	Insulation board having perforated foil (both faces) with phenolic foam core. Facings auto-adhesively bonded during manufacture.
Thickness	Composite foil : 0.38 mm Foam core: 25 to 140 mm
Mass per unit area	Composite foil: 176 gsm Foam core: 38.5 kg/m ³
Density	Foam core 38.5 kg/m ³
Colour	Pinkish foam with composite foil facing either side
Others information	No flame-retardant additives

3. REPORTS AND RESULTS IN SUPPORT OF THIS CLASSIFICATION

3.1. REPORTS

Name of Laboratory	Name of sponsor	Report ref. no	Test method and date field of application rules and date
EFECTIS UK & Ireland	Kingspan Insulation Ltd	EUI-19-SF-000052	BS EN ISO 11925-2: 2013
		EUI-19-SBI-000052	BS EN 13823+A1: 2015

3.2. RESULTS

Test method and test number	Parameter	No. Tests ^{a)}	Results	
			Continuous parameter - mean (m)	Compliance with parameters
BS EN 13823+A1 : 2015 EUI-19-SBI-000052	FIGRA _{0,2 MJ} (W/s)	3	224.8	-
	FIGRA _{0,4 MJ} (W/s)		80	-
	THR _{600 s} (MJ)		1.82	-
	LFS		-	Compliant

	SMOGRA		13.51	-
	TSP _{600s} (m ²)		53.74	-
	Flaming droplets or particles		-	Compliant
BS EN ISO 11925-2 : 2013 EUI-19-SF-000052	Fs	18	< 150 mm	-
	Filter paper		-	Compliant

a) Not for extended application
 (-) means not applicable

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with EN 13501-1:2007 + A1:2009.

4.2. CLASSIFICATION

The product, **Kooltherm K15**, in relation to its reaction to fire behaviour is classified:
C

The additional classification in relation to smoke production is:
s2

The additional classification in relation to flaming droplets / particles is:
d0

The format of the reaction to fire classification for linear pipe thermal insulation products is:

Fire behaviour		Smoke production			Flaming droplets	
C	-	s	2	,	d	0

i.e **C-s2, d0**

Reaction to fire classification	C-s2, d0
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4.3. FIELD OF APPLICATION

According to the standard for thermal insulation products. Instructions for mounting and fixing for reaction to fire (EN 15715: 2009) the classification is valid for the following field of application:

- | | |
|------------------------------|---|
| - Density | From 32.73 to 44.28 kg/m ³ |
| - Thickness | From 25 to 140 mm |
| - Colour | No variation allowed: Pinkish foam, foil composite on the side |
| - Joints/ edges | Valid for all arrangements |
| - Exposure to thermal attack | Valid for a thermal attack on the foil composite |
| - Substrate | Valid for substrates with classification at least A2-s1, d0 and with density at least 652.5 kg/m ³ |
| - Air gaps/ cavities | No air gap/cavity allowed |
| - Fixing of test specimen | Test result being obtained with a mechanical fixing is valid for the product as placed on the market. |

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 performance by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Regulation.

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.”

Belfast, on 12th September 2019

SIGNED



Adeline LE DOUARIN
Project Leader

APPROVED



Maurice MCKEE
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