Instytut Techniki Budowlanej
Research and development works | Accredited Group of Laboratories |
Notified Body N° 1488 | EOTA member | Certified management systems ISO 9001, ISO 27001

# REACTION TO FIRE CLASSIFICATION REPORT IN ACCORDANCE WITH PN-EN 13501-1:2019

**Contract no. 02487/20/Z00NZP**

| | |
|---|---|
| **Sponsor:** | **Armacell GmbH<br>48153 Münster<br>Robert Bosch Strasse 10** |
| **Prepared by:** | **Building Research Institute; 1, Filtrowa str.<br>00-611 Warszawa, Poland** |
| **Product name:** | **Pipe or duct insulation product called Tubolit Split and DuoSplit<br>No. DP20/012-1,3** |
| **Classification report №:** | **02487.1/20/Z00NZP/E/B replaces classification No 02487.1/20/Z00NZP/E** |
| **Issue number:** | **Copy № 1** |
| **Date of issue:** | **26-01-2021** |

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## 1. Introduction

This classification report defines the classification assigned to the pipe or duct insulation product called Tubolit Split and DuoSplit No. DP20/012-1,3 in accordance with the procedures given in PN-EN 13501-1:2019.

## 2. Details of classified product

### 2.1 General

Pipe or duct insulation product called Tubolit Split and DuoSplit No. DP20/012-1,3 according to Producer declaration is defined as intended for thermal insulation/protection of pipes, and ducts in offshore, industrial and process equipment facilities.

### 2.2 Product description

The product, is described below (according to Producer declaration).

Tubolit Split and DuoSplit No. DP20/012-1,3 PEF - PolyEthylen Foam according to EN 14313 and coated with a white polymeric coating.

The surface colour of the product is white.

The colour of the product is grey.

Wall thickness: 9 mm

Inner diameter: 22 mm

Density range (foam+foil): 34÷55 kg/m$^3$

## 3. Test reports & test results in support of classification

### 3.1 Test reports

| Name of laboratory | Name of sponsor | Test report № | Test method |
|---|---|---|---|
| Fire Research Laboratory Building Research Institute | Armacell GmbH | LZP01-02487/20/Z00NZP | PN-EN 13823+A1:2014 |
| | | LZP02-02487/20/Z00NZP | PN-EN ISO 11925-2:2010 |

### 3.2 Test results

| Test method | Parameter | Number of tests | Results | |
|---|---|---|---|---|
| | | | Continuous parameter – mean (m) | Compliance with parameters |
| PN-EN ISO 11925-2: 2010 Surface and edge on front and on back exposure Exposure time 30 s. (LZP02-02487/20/Z00NZP) | $F_s$ ≤150 mm | 6 | (–) | Y |
| | Flaming Droplets/particles | | (–) | Y |
| PN-EN 13823+A1:2014 (LZP01-02487/20/Z00NZP) | FIGRA $_{0,2MJ}$ | 3 | 46,9 | (–) |
| | FIGRA $_{0,4MJ}$ | | 46,9 | (–) |
| | LFS < edge | | (–) | Y |
| | $THR_{600s}$ [MJ] | | 3,6 | (–) |
| | SMOGRA [m$^2$/s$^2$] | | 0,6 | (–) |
| | $TSP_{600s}$ [m$^2$] | | 37,6 | (–) |
| | Flaming droplets/particles | | (–) | N |

(–): not applicable, Y: Yes, N: No

## 4 Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with PN - EN 13501-1:2019.

### 4.2 Classification

The product, pipe or duct insulation product called Tubolit Split and DuoSplit No.

**$B_L$**

The additional classification in relation to smoke production is:

**s1**

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 | |
|---|---|---|---|---|---|---|
| **$B_L$** | **-** | **s** | **1** | **,** | **d** | **0** |

**i.e.: $B_L$-s1,d0**

# Reaction to fire classification: $B_L$-s1,d0

### 4.3 Field of application

This classification is valid for the product described in point 2 this classification report:

- product described in point 2 of this classification report.

### 5 Limitations

This classification given remains valid as long as:
- Test method remains unchanged.
- Product standard or technical approval remains unchanged.
- Constructional or material modifications do not exceed limits of the field of application defined in 4.3.

This classification report has been issued in three copies (2 for Sponsor, 1 for archive of Fire Research Department of Building Research Institute). Additional signed copies can be issued by Fire Research Department of ITB on the request of the report's owner only.

This classification document does not represent the approval or certification of the product.

**Signed**

Robert Błajda M.Sc.Eng.

**Approved**

HEAD
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