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CNAS L4743

## Test Report

No. AJFS2101000526FF-01

Date: MAR.08, 2021

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AIRCOMPONENTS BV  
ENERGIEWEG 27  
4231 DJ MEERKERK  
THE NETHERLANDS

**THE TEST REPORT IS TO SUPERSEDE THE TEST REPORT No.: AJFS2101000526FF, DATE: MAR.04, 2021.**

The following sample(s) information was / were submitted and identified on behalf of the client. SGS is not responsible for the authenticity, integrity and results of the data and information and / or the validity of the conclusion arising therefrom. Results apply to the sample as received.

**Sample Name:** PE INSULATION TUBE

**SGS Ref No.:** SHIN2101003979SC

**Product Specification:** Ø22 / 25MM THK

### Test Requested:

EN 13501-1:2018 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

**Test Results:** -- See attached sheet --

### Test Period:

Sample Receiving Date : FEB.01, 2021

Test Performing Date : FEB.01, 2021 TO MAR.01, 2021

Signed for and on behalf of  
SGS-CSTC Co., Ltd. Anji Branch

Allen Zou  
Lab Manager

scan to see the report



AJFS2101000526FF-01



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**I. Test conducted**

This test is conducted as per EN 13501-1:2018 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests. And the test methods as following:

1. EN 13823:2010+A1:2014 Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item.
2. EN ISO 11925-2:2010+Cor1:2011 Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

**II. Details of classified product**

a) Nature and end use application

The product “PE Insulation Tube” is defined as decorative sheet. Its end use application: Air conditioning and heat pump installation.

b) Description

Description	PE Insulation Tube
Color	White
Specimens information	Wall thickness: 20mm; Internal diameter: 10mm; The space between two specimens: 25mm; The number of specimens in each test: 26
Steel pipe	Provided by client
Steel pipe size	Length: 1.5m; Overall diameter: 10mm; Wall thickness: 1.5mm

Mounting and fixing:

The test specimens were inset copper pipe and free standing in the trolley. The pipes were mounted in such a way that there is a gap of 25mm between the outside pipe insulation surfaces of the adjacent pipe and between the outside insulation surface and the backing board.

To be continued...



**III. Test results**

Test methods	Parameters	Number of tests	Results
EN 13823	FIGRA <sub>0.2MJ</sub> (W/s)	3	55.9
	FIGRA <sub>0.4MJ</sub> (W/s)		55.9
	Whether lateral flame spread (LFS) to the edge of specimen (Yes/No)		No
	THR <sub>600s</sub> (MJ)		2.5
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )		13.4
	TSP <sub>600s</sub> (m <sup>2</sup> )		24.5
	Flaming particles or droplets (Yes/No)		No
EN ISO 11925-2 Exposure = 30 s	Whether vertical flame spread (Fs) in excess of 150 mm within 60s (Yes/No)	12	No
	Ignition of the filter paper (Yes/No)		No

**IV. Classification and field of application**

**a) Reference of classification**

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

**b) Classification**

The product, PE Insulation Tube, in relation to its reaction to fire behaviour is classified:

Fire behaviour		Smoke production			Flaming droplets	
B <sub>L</sub>	—	s	1	,	d	0

**Reaction to fire classification: B<sub>L</sub>—s1, d0**

**Remark:** The classes with their corresponding fire performance are given in annex A.

To be continued...



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### c) Field of application

This classification is valid for the following end use applications:

- Free standing
- A gap of 25 mm

This classification is valid for the following product parameters:

- Characteristics as described in section II b) of this test reports.

### Statement:

This declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

### Warning:

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

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

To be continued...



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**Annex A Classes of reaction to fire performance for linear pipe thermal insulation products**

Class	Test method(s)	Classification criteria	Additional classification
A1L	EN ISO 1182 <sup>a</sup> and	$\Delta T \leq 30^\circ\text{C}$ , and $\Delta m \leq 50\%$ , and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$PCS \leq 2.0\text{MJ/kg}$ <sup>a</sup> and $PCS \leq 2.0\text{MJ/kg}$ <sup>b</sup> and $PCS \leq 1.4\text{MJ/m}^2$ <sup>c</sup> and $PCS \leq 2.0\text{MJ/kg}$ <sup>d</sup>	-
A2L	EN ISO 1182 <sup>a</sup> or	and $\Delta T \leq 50^\circ\text{C}$ , and $\Delta m \leq 50\%$ , and $t_f \leq 20\text{ s}$	-
	and EN ISO 1716		-
	EN 13823	$FIGRA \leq 270\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5\text{MJ}$	Smoke production <sup>e</sup> and Flaming droplets/particles <sup>f</sup>
B <sub>L</sub>	EN 13823 and	$FIGRA \leq 270\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5\text{MJ}$	Smoke production <sup>e</sup> and Flaming droplets/particles <sup>f</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure =30s	within 60s $F_s \leq 150\text{mm}$	
C <sub>L</sub>	EN 13823 and	$FIGRA \leq 460\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 15\text{MJ}$	Smoke production <sup>e</sup> and Flaming droplets/particles <sup>f</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure=30s	$F_s \leq 150\text{mm}$ within 60 s	
D <sub>L</sub>	EN 13823 and	$FIGRA \leq 2100\text{W/s}$ $THR_{600s} \leq 100\text{MJ}$	Smoke production <sup>e</sup> and Flaming droplets/particles <sup>f</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure=30s	$F_s \leq 150\text{mm}$ within 60 s	
E <sub>L</sub>	EN ISO 11925-2 <sup>h</sup> Exposure =15s	$F_s \leq 150\text{mm}$ within 20 s	flaming droplets/particles <sup>g</sup>
F <sub>L</sub>	EN ISO 11925-2 <sup>h</sup> Exposure =15s	$F_s > 150\text{mm}$ within 20 s	

To be continued...



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a For homogeneous products and substantial components of non-homogeneous products.  
 b For any external non-substantial component of non-homogeneous products.  
 c For any internal non-substantial component of non-homogeneous products.  
 d For the product as a whole.  
 e **s1** = SMOGRA  $\leq 105 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 250 \text{ m}^2$ ; **s2** = SMOGRA  $\leq 580 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 1\,600 \text{ m}^2$ ;  
**s3** = not s1 or s2  
 f **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.  
 Ignition of the paper in EN ISO 11925-2 results in a d2 classification.  
 g Pass = no ignition of the paper (no classification);  
 Fail = ignition of the paper (**d2** classification).  
 h Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.

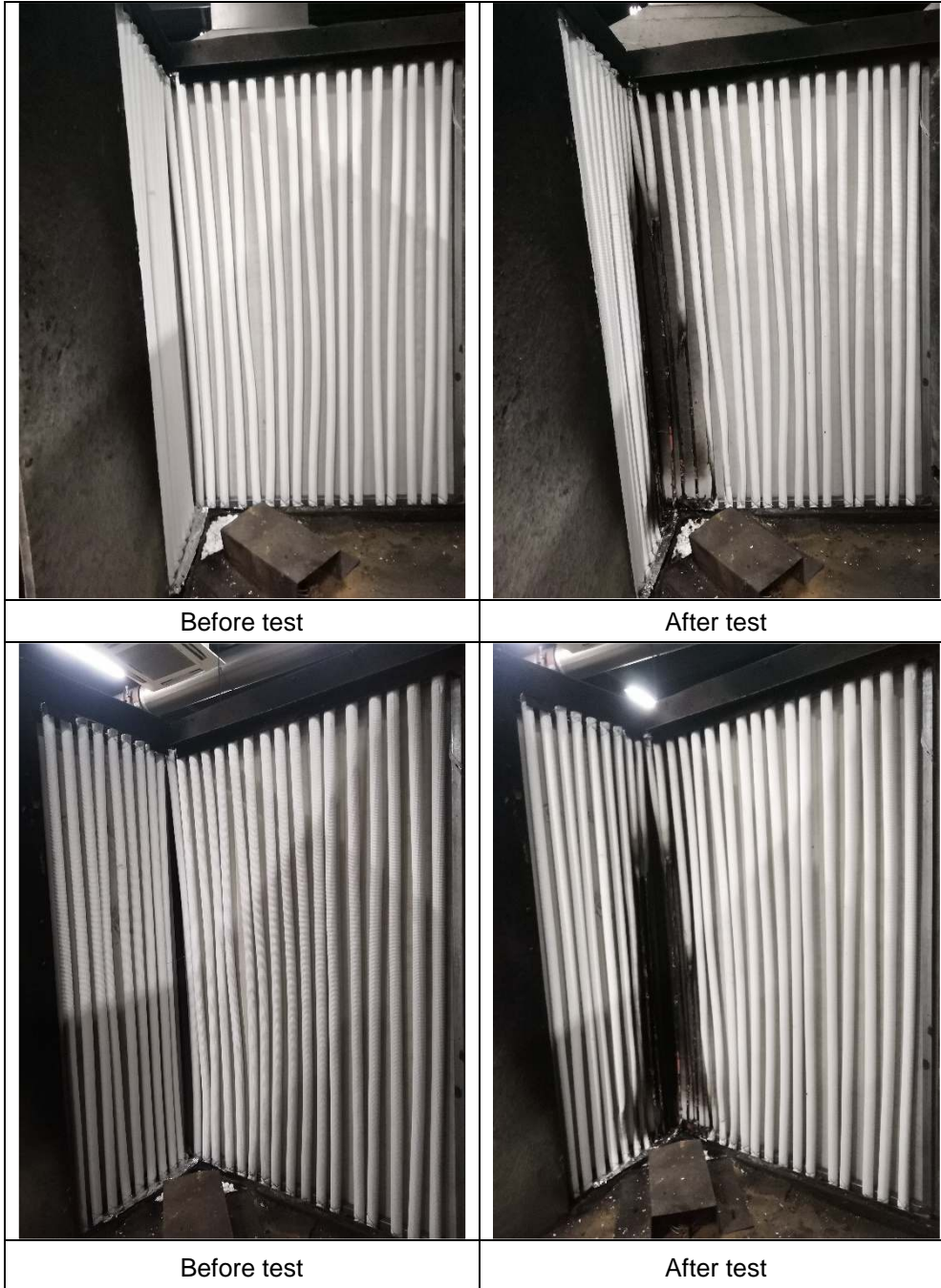
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Photo Appendix:



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\*\*\*End of Report\*\*\*



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