



**Testing Protocol No. 11/2024/1A**

according to

**STN EN ISO 1716:2019 Skúšky reakcie výrobkov na oheň. Stanovenie celkového spalného tepla.**

**(Reaction to fire tests for products.**

**Determination of the gross heat of combustion (calorific value)).**

**No.:** PEU2 –100-002/2023

**Number of pages of the Protocol:** 2

**Number of issues:** 3

**Issue No. 1-2 :** Client

**Issue No.:** 2

**Issue No. 3 :** Testing Laboratory

**Client:** 1. Fires, s.r.o., Osloboditeľov 282, 059 35 Batizovce, Slovakia

2. Terratico j.s.a., Poštová 3049/1, 01008 Žilina, Slovakia

**SUBJECT OF TEST:**

**Name:**

Building materials and products

matrix based on Terratico cement

**Producer:**

Terratico j.s.a., Poštová 3049/1, 01008 Žilina, Slovakia

**Batch number:**

Not specified

**Place of production:**

Not specified

**Sample Identification Number:**

11/24

**Date of sample receiving:**

march 15<sup>th</sup>, 2024

**Sampling:**

added by the customer

**Date of test carried out:**

March 18<sup>th</sup>, 2024

**Place of testing:**

PTEU MV SR, Rožňavská 11, 831 04 Bratislava

**Characteristics, preparation of testing specimen and test conditions:**

The test sample is material - matrix based on Terratico cement, based on components used in concrete, i.e. binder, filler, water and additives that are supplemented with "plastic crumb". This is waste material treated by crushing, sorting and fractionation. The sample was conditioned pursuant to the STN EN 13238:2010, Clause 4 and tested in such state as submitted by the client. Temperature in the testing room during measurement was  $(25.0 \pm 0.2)^\circ\text{C}$ . The test was carried out in the Calorimeter IKA C 6000. The Calorimeter Water Equivalent was  $0.01 \text{ MJ}\cdot\text{K}^{-1}$ .

**Recorded measured values and test result:**

<b>Total heat of combustion - Specimen No. 1</b>	<b>Total heat of combustion - Specimen No. 2</b>	<b>Total heat of combustion - Specimen No. 3</b>	<b>Total heat of combustion of material</b>
[MJ.kg <sup>-1</sup> ]	[MJ.kg <sup>-1</sup> ]	[MJ.kg <sup>-1</sup> ]	[MJ.kg <sup>-1</sup> ]
1.726	1.657	1.687	(1.690± 0.061)

During combustion, burned residues originated.



REPORT ON THE RESULTS OF THE TESTS  
TEST NUMBER: 11/2024/1A  
TEST DATE: 18.03.2024  
TESTING LABORATORY: HASIČSKÝ ZBOR  
ADRESA: Bratislava, Slovensko  
TEL: +421 2 52 22 11 11

The product matrix based on Terratico cement in the calorimetric pressure vessel in the compressed oxygen environment reached total calorific value:

$$(1.690 \pm 0.061) \text{ MJ.kg}^{-1}$$

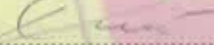
Tests were carried out in accordance with the STN EN ISO 1716:2019 without any modification.

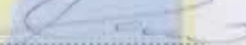
These test results refer to characteristics changes of testing specimens of product under specific test conditions; these results are not intended to be the only one criterion for potential fire hazard evaluation of products during their use.


Test result refers to subject of test only that is characterized in Clause "Subject of tests" of this Protocol and relates to the sample as received.

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**Date:** March 18<sup>th</sup>, 2024

**The test carried out by:**   
Ing. Katarína Dritomská

**Record processed by:**   
Ing. Katarína Dritomská

**Approved by:**   
Ing. Stanislav Flimel  
Head of the Authorized Body

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AUTORIZOVANÁ OSOBA MDVR SR  
registr. č.: SK 63

stamp

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