FIRE TESTING LABORATORY VESELÍ NAD LUŽNICÍ

testing laboratory accredited by the Czech Accreditation Institute, o.p.s

registration number 1026

FIRE REACTION TEST
REPORT

n. Pr-07-1.008

issued on 2007-01-08

for product

Plastic Material
TRAPLAST

Ordering party: **TRANSFORM a.s.**
Na Lužci 659
533 41 Lázně Bohdaneč

Testing method:

ČSN EN ISO 11925 – 2

>Fire reaction testing - Flammability of Construction Products When Exposed to Open Flame

- Part 2: Small Flame Source Test<

Report consists of: 4 pages
(3 pages of text + 2 appendices)

Number of copies: 3
Copy number: 2

Prosecká 412/74, 190 00 Praha 9 – Prosek , e-mail: mail@pavus.cz, http://www.pavus.cz
IČ: 60193174, DIČ: CZ60193174, incorporated in the Commercial Register at Municipal court in Prague, Part B, File 2309
Tel.: 286 019 587 Fax: 286 019 590
Pobočka Veselí nad Lužnicí
Tel.: 286 019 587 Fax: 286 019 590
čtvrť J. Hybeše 879, Veselí nad Lužnicí, e-mail: veseli@pavus.cz
Tel. +420381 581 128, +420381 581 129 GSM brána: +420 603 296 301, Fax: +420381 581 127

1 INTRODUCTION

Tests of flammability of plastic material TRAPLAST for class E of reaction to fire when exposed to a small flame source were ordered by TRANSFORM a.s. and carried out in Zkušební laboratoř (Testing Laboratory) in Veselí nad Lužnicí.

The tests were prepared, carried out and evaluated pursuant following documents:

[1] ČSN EN ISO 11925 – 2 Testing of reaction to fire

- flammability of construction products exposed to open fire
- Part 2: Test by a small flame source

[2] ČSN EN 13238 Testing of reaction of the construction products to fire

- Conditioning procedure and general rules for material choice.

[3] Letter of protection and technical sheet of the tested product.

2 Subject to testing

6 pcs of sample boards made of plastic material TRAPLAST of 250 x 90 x 20 mm were a subject to testing.

Product name: plastic material TRAPLAST

Producer: TRANSFORM a.s.
Na Lužci 659
533 41 Lázně Bohdaneč

The samples were delivered to the testing laboratory on 10 November 2006 and until the testing they were kept in an air-conditioned room, in standard environment in compliance with [2].

3 TESTING

3.1 Generally

The tests were carried out in compliance with [1]

See Appendix 1 for testing and measuring equipment used.

The tests were conducted in the testing laboratory on 8 January 2006. Air temperature was 18şC and relative humidity was 54%.

3.2 Testing Methodology

The individual, vertically positioned samples in order from 1 to 6 are surface-exposed to open flame along vertical axis of the tested subject 40 mm above its bottom edge. A small burner is moved horizontally under the angle of 45ş towards the subject until the flame reaches the previously defined point of contact. The tested subject is exposed to the effect of the small burner for 15 s from the first contact of the subject and the flame. Than the burner is put further away.

We evaluate flame expansion above 150 mm from the point of contact of the testing flame, time when the expansion occurred and combustion of the filter paper placed under the tested subject. We trace contingent flame expansion within 20 s after the small testing flame from the burner was applied.

4 Test Results

4.1 Results expression in compliance with [1]: art. 8 is summarized in the table below:

Sample number	Sample Combustion (yes – no)	Time (s) of the flame reaching the distance of 150 mm above the point of contact of the small burner	Combustion of Filter Paper (yes – no)
1	no	-	no
2	no	-	no
3	no	-	no
4	no	-	no
5	no	-	no
6	no	-	no

4.2 Testing Process

After the contact of the sample and the small flame there appeared slight surface melting in areas of thermal load. Combustion was not recognized. The surface melting reached the height of approx. 40 mm from the contact point with the flame. The filter paper was not lit.

5 CONCLUSION

The test results relate to behaviour of the tested product bodies under particular testing conditions and they are not supposed to be the only criteria for evaluation of possible fire hazard of the product when being used.

The sheets of the report and the appendices are valid
only with an impression of an embossing seal

Worked out by: ….....
Jiří Přibyl
Technician of Fire Testing Laboratory

Approved by: ….....
Ing. Jiří Kápl
Head of Fire Testing Laboratory

APPENDIX 1: TESTING AND MEASURING EQUIPMENT, MEASUREMENT UNCERNTAINTY

Testing equipment	**Key number**
Testing chamber	10.013
Testing hood with air venting	-
Equipment for fixing tested subject	10.013
Small gas burner with fine valve	10.013
Gauge for angle of 45°	10.013, 10.013/a

Measuring equipment	**Metrological key number**
Stop-watch	3 05 01
Thermo hydrograph THZ 1int	3 13 05
Calliper	3 01 06
5m tape measure SC - 50	3 01 05
Flame gauge 5 – 10- 20- 30	3 01 25
Anemometer AMR THERM 2253 - 2	3 08 01

Metrological relationship of the equipment is described on the metrological record card of the equipment which is exclusively identified by the metrological key number of the equipment.

Measured value	**Extended measurement uncertainty**
Time	1 s
Ambient air temperature	< 2 °C
Relative humidity of ambient air	3%
Length dimensions	0.1 mm
Speed of air flow	0.1 m/s

The stated extended measurement uncertainties are the product of the standard measurement uncertainty and the extension coefficient k = 2 which, for normal distribution, corresponds the coverage probability of 95%.

The standard measurement uncertainty was defined in compliance with EA-16/02 and GUM.