



Environmental Lab



Materials Lab



Fire Lab



New Technologies

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Test Report No. P60-16-0807en

Firetesting

Order number: 60-16-0553
Date: 28.10.2016
Editor: Mr. Harder
Documentation: Hs

This report consists of
4 page(s) and 0 enclosure(s).

Fon: 03302 49982 60

Delivery date specimen: 14.10.2016

Test date: 28.10.2016

Test specimen: 750mL Hilti CF-I 65 ECO

Order number: form dated

Order date: 21.09.2016

Relevant specification: Examination according to DIN EN 60695-2-11 (11/2014)
Examination for evaluation of the fire hazard
Glow-wire flammability test method for end-products

Objective: Evaluation of the fire hazard for end-products

Test results: GWEPT: 650
burning duration t_b [s] = -
ignition of the underlayer [yes/no] = no
This does ensure the requirements for glow-wire based test method according to DIN EN 60695-2-11. The defined criteria are sufficient to verify the accordance with the safety requirements. Details on the following pages

Note: The results in this test report relate only the behavior of the product under the particular conditions of this test.



Stefan Harder
Head of Fire Lab

The results refer only to the specimens mentioned above.
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1 Details about the specimen

Material or combination of materials:

Batch Number: 206436181
Material Type: one component PU foam
Chemical Composition: polyol + isocyanate + propellant gas
Article n°: 124320
Trade name: 750mL Hilti CF-I 65 ECO

Dimensions of sample:

length [mm]: 68
width [mm]: 68
thickness [mm]: 57
weight [g]: 2,553
(Average value of all samples)

Side of specimen to be tested by flame/impact-point on the specimen:

Sides identical

Procedure of sampling/number of specimen of specimen:

quantity: 1

Environmental conditions:

air temperature [°C]: 21
rel. humidity [%]: 49

2 Test equipment

The test and measuring instruments as well as the calibrations status were checked before using.

Test instruments	Id.-Nr.
glow-wire test rig according DIN EN 60695-2-10	79932120

2.1 Parameter of the test rig:

diameter of the glow-wire point [mm]:	4,21
test temperature of the glow-wire point [°C]:	650
used underlayer:	wood and tissue paper
multiple exposure of a sample [yes/no]:	no

3 Results:

conditioned in laboratory: normal climate according DIN 50014 - 23/50-2

duration of conditioning: >24 h

table 1 – results overview

Measurements / observations	dimension	sample 1
time of exposure t_a :	[s]	30
time of ignition t_i :	[s]	-
burning duration t_b :	[s]	-
height of flame:	[mm]	-
ignition of the underlayer:	[yes/no]	no
	burning duration [s]	-

if not applicable "-"

notes: none

Signum
Prüfer:



4 Short description of the test method according to EN 60695-2-11:

The test method according DIN EN 60695-2-11 is a test method for assessing the fire hazard of final products by testing with a glow-wire. The purpose of this test method is to test the impact of thermal stress of a heat source like glowing parts or temporarily overloaded electrical resistor. The glow-wire consists of a defined loop of resistor-wire which will be heated up electrically. The tip of the glow-wire is brought in contact with the sample for a defined duration and certain observations of the sample will be made. The sample has passed the test if no ignition or glowing of the sample or the underlayer occurred and all following conditions are met.

- a) flames or glowing extinguish within 30s after removing the glow-wire ($t_e \leq t_a + 30s$) and
- b) no ignition of the underlayer occurred, if a underlayer of tissue paper is used.

5 Visual documentation:

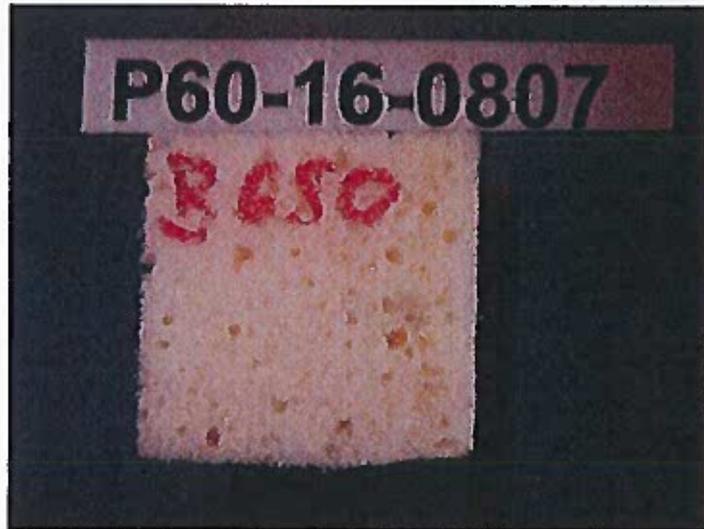


Fig.1 - specimen before testing (front side)

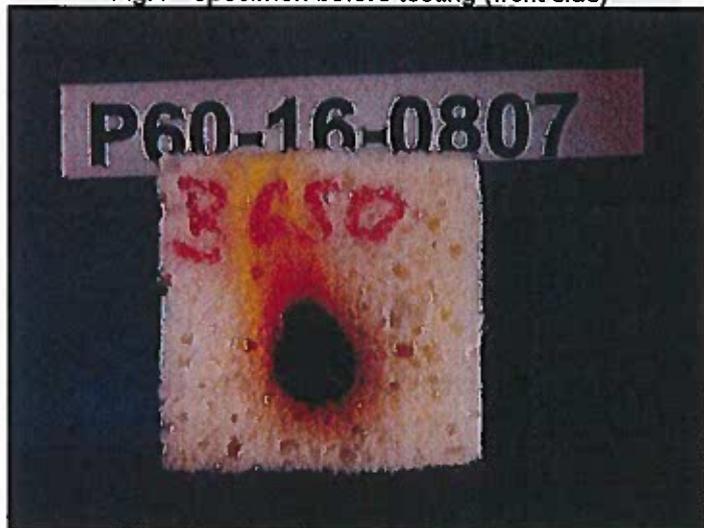


Fig.2 - specimen after testing

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Test Report No. P60-16-0808en Firetesting

Order number: 60-16-0553
Date: 28.10.2016
Editor: Mr. Harder
Documentation: Hs

This report consists of
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Fon: 03302 49982 60

Delivery date specimen: 14.10.2016

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Test specimen: 750mL Hilti CF-I 65 ECO

Order number: form dated

Order date: 21.09.2016

Relevant specification: Examination according to DIN EN 60695-2-11 (11/2014)
Examination for evaluation of the fire hazard
Glow-wire flammability test method for end-products

Objective: Evaluation of the fire hazard for end-products

Test results: GWEPT: 850
burning duration t_b [s] = -
ignition of the underlayer [yes/no] = no
This does ensure the requirements for glow-wire based test method according to DIN EN 60695-2-11. The defined criteria are sufficient to verify the accordance with the safety requirements. Details on the following pages

Note: The results in this test report relate only the behavior of the product under the particular conditions of this test.


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Batch Number: 206436181
Material Type: one component PU foam
Chemical Composition: polyol + isocyanate + propellant gas
Article n°: 124320
Trade name: 750mL Hilti CF-I 65 ECO

Dimensions of sample:

length [mm]: 68
width [mm]: 68
thickness [mm]: 57
weight [g]: 2,549
(Average value of all samples)

Side of specimen to be tested by flame/impact-point on the specimen:

Sides identical

Procedure of sampling/number of specimen of specimen:

quantity: 1

Environmental conditions:

air temperature [°C]: 21
rel. humidity [%]: 49

2 Test equipment

The test and measuring instruments as well as the calibrations status were checked before using.

Test instruments	Id.-Nr.
glow-wire test rig according DIN EN 60695-2-10	79932120

2.1 Parameter of the test rig:

diameter of the glow-wire point [mm]:	4,21
test temperature of the glow-wire point [°C]:	850
used underlayer:	wood and tissue paper
multiple exposure of a sample [yes/no]:	no

3 Results:

conditioned in laboratory: normal climate according DIN 50014 - 23/50-2

duration of conditioning: >24 h

table 1 – results overview

Measurements / observations	dimension	sample 1
time of exposure t_a	[s]	30
time of ignition t_i	[s]	-
burning duration t_b	[s]	-
height of flame:	[mm]	-
ignition of the underlayer:	[yes/no]	no
	burning duration [s]	-

if not applicable "-"

notes: none

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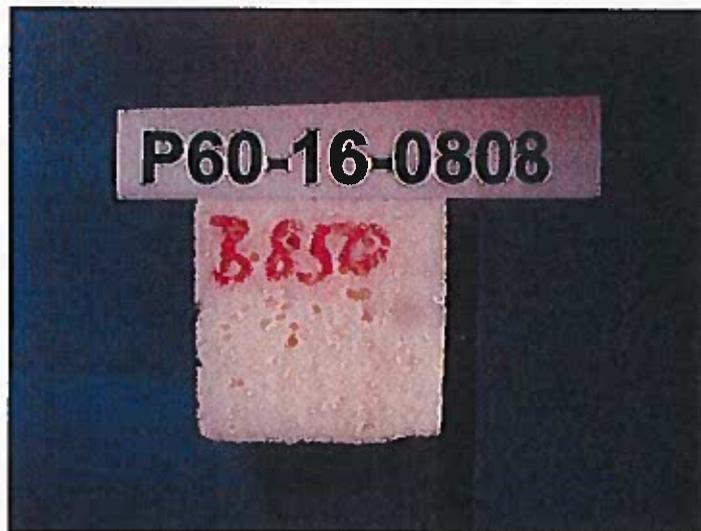


Fig. 1 - specimen before testing (front side)

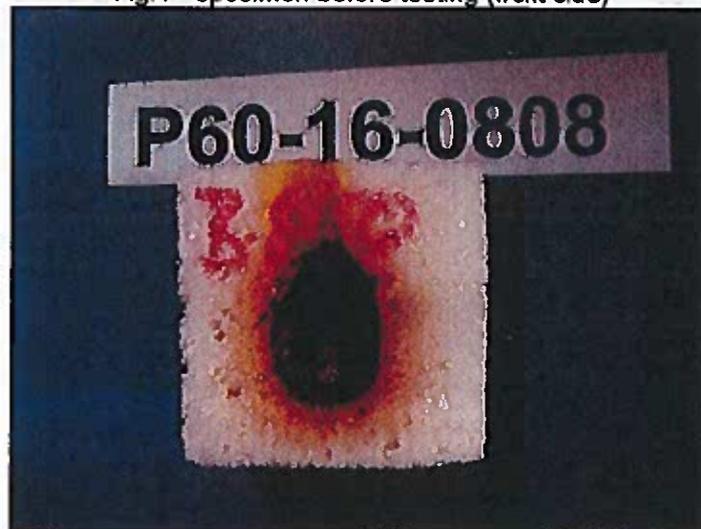


Fig. 2 - specimen after testing