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original date
19/01/2017

TEST REPORT 16-1514-02
Translation of test report 16-1514-01 from 19-01-2017

Samples received

<u>Name</u>	<u>Date of receipt</u>
Flat needlepunched carpet with a 100% polypropylene wear layer with impregnation based on fire retardant latex SBR Commercial reference: BRISTOL Colour: anthracite Production date : 15/12/16 OF 1627938 Mother bobbin: 160287537 daughter bobbin: 160294454	21/12/2016

Aim of the test

Determination of the fire behaviour

Test conditions

Small flame test

Standard: **ISO 11925-2 (2010 + AC 2011)***
Method: The use surface of a vertically put specimen placed (loose laid) on a fibre cement board (according to EN 13238) is ignited by a propane gas flame. Under condition of a surface flame attack with 15 s exposure time, there shall be no flame spread in excess of 150 mm vertically from the point of the test flame within 20 s from the time application.
If the boundary line is not reached within 20 s, the sample meets the requirements for the class E_{fl}.
Number of tests: 3 lengthwise and 3 crosswise
Uncertainty of measurement: The relative reproducibility for 3 repetitions is 27.2% for the burn time.
Conditioning samples: 23 ± 2 °C and 50 ± 5 % R.H.

Fire Behaviour

Standard: **EN ISO 9239-1 (2010)***

Method: A floorcovering is put on (**loose laid**) a fibre cement board (according to EN 13238). During the test, the specimen is irradiated by a gas radiator at an angle of 30°. A small flame is used to ignite the specimen. The specimen is ignited during 10 minutes. In case of inflammable specimens, the test lasts until the flame is extinguished, but 30 minutes at the most. The criterion is the burned length, from which the critical radiant flux is deduced using a calibration curve.

Number of tests: 1

Uncertainty of measurement: The relative reproducibility for 3 repetitions is 13% for flux and 59% for smoke.

Conditioning samples: 23 ± 2 °C and 50 ± 5 % R.H.

The tests were finished in week 3/2017

OBTAINED RESULTS

Flammability

Ignition time: 15 s.

Lengthwise

Sample	Burning time (s)	After glowing time (s)	Boundary line reached
1	15 s	-	No
2	16 s	-	No
3	16 s	-	No

Crosswise

Sample	Burning time (s)	After glowing time (s)	Boundary line reached
1	16 s	-	No
2	23 s	-	No
3	15 s	-	No

Fire behaviour

Specimen number	1 Length	2 Width	3 Length	4 Length	Average Specimens 1,3,4
Flame spread after 10 min (mm)	0	0	520	0	
Flame spread after 20 min (mm)	0	0	800	0	
Flame spread after 30 min (mm)	0	0	850	0	
Flame spread at extinction (mm)	0	0	850	0	
Flame time	12min 0s	12min 0s	22min 57s	12min 0s	
Critical heat flux CHF at extinction (kW/m ²)	11.1	11.1	1.4	11.1	7.9
Total smoke production at end of test (% min)	11	8	65	8	28

Didier Van Daele
Head of Floor covering and Fire Tests

Prof. Dr. Paul KIEKENS, dr. h. c.
Director

ENCLOSURE TO REPORT 16-1514-02

Classification according to EN 13501 –1 (2007 + A1: 2009)*

Classification	EN ISO 11925-2 (ignition time = 15 s)	EN ISO 9239-1 (test period = 30 min)	CLASS
B _{fl}	F _s ≤ 150 mm in 20 s	Critical flux ≥ 8.0 kW/m ²	
C _{fl}	F _s ≤ 150 mm in 20 s	Critical flux ≥ 4.5 kW/m ²	X
D _{fl}	F _s ≤ 150 mm in 20 s	Critical flux ≥ 3.0 kW/m ²	
E _{fl}	F _s ≤ 150 mm in 20 s	No demand	
F _{fl}	No demand	No demand	

Additional classification smoke development according to EN 13501-1 (2007 + A1:2009)*

		CLASS
Smoke development ≤ 750%.min	s1	X
Smoke development > 750%.min	s2	