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Reaction to fire testing of Sonaspray K 13 st - sp - FC - FCX, according to EN ISO 11925-2:2002

Efectis Nederland BV

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Date	April 2008
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Sponsor	Asona Benelux BV P.O. Box 9057 NL-1180 MB AMSTELVEEN The Netherlands
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This report is issued by the TNO company Efectis Nederland BV (previously **TNO** Centre for Fire Research). TNO decided, in response to international developments and requests by customers, to collaborate with two European Egolf partners, both highly experienced in fire safety: the Norwegian **Sintef/NBL** and the French **CTICM**. Thus, through scaling up, a more comprehensive service of high quality and a wider range of facilities can be offered. In order to achieve this, the fire safety related activities of the partners involved have been privatised in this collaboration. With respect to TNO this has led to the privatisation on the 1st of July 2006 of the activities of the TNO Centre for Fire Research via the establishment of the company Efectis Nederland BV.

Product identification:
Sonaspray K 13 st - sp - FC - FCX, further referred to as 'the product'.

Abstract:
Twelve specimens of the product were subjected to direct impingement of a small flame according to EN ISO 11925-2:2002.

Intended application:
The product will be used as a wall, facade or ceiling covering.

Manufacturer/importer:
Asona Benelux BV
P.O. Box 9057
NL-1180 MB AMSTELVEEN
The Netherlands

Product description:
According to the sponsor the product is composed of:
- Cellulose from recycled paper with an addition of Borax salts, to provide the product with fire resistant properties.
- The Sonaspray is applied by spraying with a mix of 80% water and 20% adhesive. The adhesive is a copolymer with a small addition of Poly Vinyl Alcohol.
- The thickness of the sprayed layer is approx. 20 mm, with a surface density of 2.75 kg/m^2.

Samples:

Sampling procedure:	The samples were prepared and sent in by the sponsor.
Age:	At the time of receipt: approx. 6 weeks. At the start of the examinations: 2 weeks.
Date of receipt:	April 8, 2008

Specimen preparation:

Substrates used:	Paper faced plasterboard, thickness 12 mm
Method of fixing:	Spraying
Conditioning:	Prior to the examinations, the specimens were conditioned over a period of 2 weeks at a temperature of (23 ± 2) °C and a relative humidity of (50 ± 5) %, according to § 4.1 of EN 13238:2001.

Examination:

Number of tests:	A total of twelve single ignitability tests were carried out according to EN 11925-2:2002
Deviations from the test method:	None
Harmonised Product Standard:	At the time of examination of the product, the sponsor was not aware of a related existing Harmonised Product Standard.

The results are given in Table 1.

Date of examination:
April 25, 2008

Table 1: Ignitability classification parameter results

Flame application time: 30 s					
	Ignition of sample	Maximum flame height	t_{150}	Afterburning time	Ignition of filter paper
Sample	{Y=Yes/N=No}	[mm]	[s]	[s]	{Y=Yes/N=No}
Surface ignition					
1	N	55		0	N
2	N	60		0	N
3	N	55	∞	0	N
4	N	55	not reached	0	N
5	N	60		0	N
6	N	65		0	N
Classification parameters		**150 mm not reached within 60 s**			**N**
Edge ignition					
1	N	35		0	N
2	N	40		0	N
3	N	50	∞	0	N
4	N	45	not reached	0	N
5	N	50		0	N
6	N	50		0	N
Classification parameters		**150 mm not reached within 60 s**			**N**

Observations of physical behaviour of the test specimen:
The material did not shrink and melt away from the flame without ignition. Applying the testing protocol as specified in Annex A of the standard was therefore not necessary.

Conclusions:
A formal classification is to be assessed in accordance with EN 13501-1, "Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests".

Remarks:
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.

Regarding the precision of the test method, following Annex B of EN 11925-2 the absolute repeatability/reproducibility for this test method is estimated to lie within 3 s to 5 s for all times measured.

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