

## Efectis Nederland BV



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Excellent Systems AS  
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### Subject

Summary of indicative ignitability tests according to EN-ISO 11925-2:2002 on Injection moulded LDPE Excellent Tiles  
Project number: 2008671  
**Efectis Nederland-report<sup>1</sup> 2008-Efectis-R0416**

### Date

June 11, 2008

### Our reference

2008-Efectis-R0416/SEC/DNA

### E-mail

christoffel.steinlage@efectis.com

Dear Mr. Meyer,

### Direct dialling

+31 15 276 3426

On April 2, 2008, we have performed, on behalf of your firm, indicative ignitability tests according to EN-ISO 11925-2:2002 on one of your products: Injection moulded LDPE Excellent Tiles, article number 12503.

### Direct fax

+31 15 27 63025

This letter is meant as a final reporting of this part of the examination program on the described products.

Efectis Nederland BV:  
a TNO Company

### *Purpose of testing:*

The purpose of the test was to find out which classification could be achieved for the product, according to the European classification standard EN 13501-1.

The Standard Conditions for Research Instructions given to Efectis, as filed at the Registry of the District Court and the Chamber of Commerce in The Hague shall apply to all instructions given to TNO; the Standard Conditions will be sent on request.

<sup>1</sup> This report is issued by Efectis Nederland BV (previously TNO Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1 January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatized in Efectis Nederland BV since 1<sup>st</sup> July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sinter-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.



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*Sample:*

In February 2008, twelve test samples of the product were submitted by your firm. The product has a thickness of 20 mm and is made of low density polyethylene (924 kg/m<sup>3</sup>), without flame retardant additives. The dimensions of the specimens were according the requirements of the standard EN ISO 11925-2.

*Examination:*

In total six ignitability tests, according to EN-ISO 11925-2:2002, were carried out. Prior to testing the specimen were conditioned according to EN 13238.

*Test result:*

Table 1: Ignitability test results

<b>Flame application time: 15 s</b>				
Sample	Ignition of sample {Y=Yes/N=No}	Maximum flame height [mm]	t <sub>150</sub> [s]	Afterburning time [s]
<b>Surface ignition</b>				
1	N	35	∞	0
2	N	40	not reached	0
3	N	40	not reached	0
<b>Edge (of opening on the surface) ignition</b>				
1	Y	35	∞	> 5
2	N	35	not reached	0
3	Y	25	not reached	> 5

<b>Classification criteria the ignitability test To be used after a full examination in combination with tests according to EN-ISO 9239-1</b>		
Class	Flame application time [s]	Classification criteria
B <sub>fl</sub>	15	Maximum flame height ≤ 150 mm within 20 s
C <sub>fl</sub>		
D <sub>fl</sub>		
E <sub>fl</sub>		

*Assessment:*

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.

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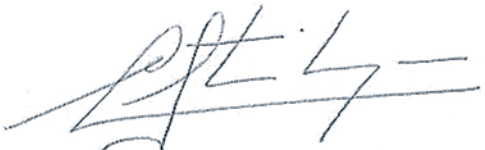
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*Remark:*

Only based on the classification parameters results of a complete test series a formal classification can be determined. Because the examination performed deviates from the applicable standard in several aspects, Efectis Nederland can not perform a classification.

Indicative examination is carried out by Efectis Nederland to give the contractor insight in the reaction to fire behaviour properties of the product(s).

Sincerely yours,



Ing. C.C.M. Steinhage



W. Langstraat

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