



**AFITI**  
**LICOF** Center for Fire Testing  
and Research

Association for the Promotion of Research  
and Fire Safety Technology



# TEST REPORT

## Reaction to Fire Laboratory

### APPLICANT:

BONA KEMI, S.L.

### TEST:

**Reaction to fire** test. Ignitability of building products subjected to direct impingement of flame according to **UNE EN ISO 11925-2:2002 Standard**.

- Material: Polyurethane varnish in watery dispersion.
  - Manufacturer: Bona Kemi, S.L.
  - Reference: "SPORTIVE FINISH"



MINISTERIO  
DE INDUSTRIA, TURISMO  
Y COMERCIO

LICOF: Official Laboratory for Fire Testing  
R.D. 1614/1985 on 1st Agust.  
O.M. On 21st May 1991.

#### HEAD OFFICE & LABORATORIES

Address Ant. Ctra. Valencia, km 23,400.  
E-28500 ARGANDA DEL REY (Madrid)

Telephone +34 91 871 35 24  
Fax +34 91 871 20 05

Web [www.afiti.com](http://www.afiti.com)  
E.mail [licof@afiti.com](mailto:licof@afiti.com) [afiti@afiti.com](mailto:afiti@afiti.com)

#### CENTRAL OFFICE & LABORATORIES

C/ Río Estenilla, s/n - Pol. Ind. Sta. M<sup>a</sup> de Benquerencia  
(Centro Tecnológico de la Madera)  
E-45007 TOLEDO  
+34 925 231 559  
+34 925 240 679



**AFITI**  
**LICOF** Center for Fire Testing  
and Research



MINISTERIO  
DE INDUSTRIA, TURISMO  
Y COMERCIO

**Tomás de la Rosa Sánchez**, General Director of AFITI declares:

- That AFITI (Association for the Promotion of Research and Fire Safety Technology), is a non profit-making association and was declared Association of Public Utility by the Spanish Cabinet on 27th January 1995.
- That the ownership of LICOF (Centre for Fire Testing and Research) is of Ministry of Industry, Tourism and Trade, by R.D. 1614/85 and O.M. on 21st may 1991, corresponding, by agreement, the management to AFITI.
- That the tests included in this Technical Report have been carried out at the Technical Unit of Test (LICOF).
- That these tests have been developed under the framework of agreement signed between the Association for the Promotion of Research and Fire Safety Technology (AFITI) and Association for Wood Research and Development of Castilla-La Mancha (A.I.M.C.M.).
- That LICOF is the Fire Testing and Research Center corresponding to the Technical Unit of Test accredited by the National Accreditation Body (ENAC), to act under files Nr. 41/LE104 and Nr. 41/LE204.

21<sup>ST</sup> of June of 2006

Signed: Tomás de la Rosa Sánchez  
General Director

---

Recognition / Accreditation: MINISTERIO DE INDUSTRIA, TURISMO Y COMERCIO, MINISTERIO DE FOMENTO, ENAC & IMO.

Notify Body: NOTIFY BODY TO THE EUROPEAN COMMISSION WITH NR. 1168.

Member of: AEC, AELAF, AENOR, ASELF, AIDICO, EGOLF, ENAC, EUROLAB, FORÉTICA & NFPA.

**APPLICANT****BONA KEMI, S.L.**C/ Paloma, 1. Ind Area. "Los Gallegos"  
28946-FUENLABRADA (Madrid)Test application date: 02<sup>nd</sup>-Mar-06**TEST SAMPLE**Type of sample: **Polyurethane varnish in watery dispersion.**  
Manufacturer: Bona Kemi, S.L.  
Reference: "SPORTIVE FINISH"**TEST PERFORMED****Reaction to fire tests.** Ignitability of building products subjected to direct impingement of flame according to **UNE EN ISO 11925-2:2002 Standard.**Test date: 21<sup>st</sup>-Apr-06**Content of the report**

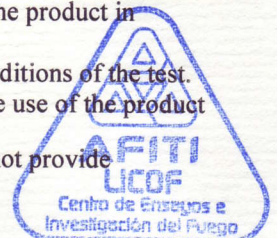
1.- Test sample	.....	Sheet	3
2.- Test Performed	.....	Sheet	3
3.- Results	.....	Sheet	4
ANNEX 1: Technical Documentation	.....	Sheet	6

The results of this report of test make sole and exclusive reference to the samples tested and not to the product in general.

The results of the test correspond to the behaviour of samples of test of a product, under the own conditions of the test. It does not try to constitute the only criterion of valuation of the potential risk of fire that can bear the use of the product

The information held in this Report of test is of a confidential nature, meaning the Laboratory shall not provide information in relation to this report to third parties, except with the authorisation of the Applicant.

This Test Report should not be partially reproduced without the Laboratory's written approval.



## 1.- TEST SAMPLE

**Reception:** 05<sup>th</sup>-Apr-06

- Units: 4 samples of 1050 mm x 230 mm.  
6 samples of 250 mm x 90 mm.
- The samples are received without any package.
- The samples have been sent and selected by the applicant.

**Description:**

Colourless polyurethane varnish in watery dispersion with smooth aspect. It is applied (4 hands) onto standardized fibrecement substrate by the applicant.

The sample main characteristics have been sent by the applicant. This information is included in Annex 1 of the present Test Report.

**Information about the destiny of application of the samples (material).**

The varnish is designed to be used in/above sport floorings.

## 2.- TEST PERFORMED

Test according to standard UNE EN ISO 11925-2:2002 "*Reaction to fire test. Ignitability of building products subjected to direct impingement of flame. Part 2: Single-flame source test*".

The Standard used for the conditioning has been the UNE EN 13238:2002 "*Reaction to fire tests for building products. Conditioning procedures and general rules for selection of substrates*".

**3.- RESULTS****Test conditions**

<b>Samples conditioning</b>	Temperature (°C)	24
	Humidity (%)	50
	Conditioning time (hours)	49

**Samples position during the test**

Kind of material	Plane material which doesn't fuse and doesn't retract
Exposition conditions	Exposed surface
Used substrate	Fibre cement
Kind of fixing	Applied with roller (4 hands)
Way of fixing	Autosupported
Exposed surface	Varnished face

**Flame application time (s)**

15

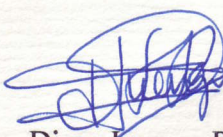
**Expression of results**

	<b>Muestra nº</b>					
	T0807E	T0807F	T0807G	T0807H	T0807I	T0807J
Ignition (yes/no)	no	no	no	no	no	no
Ignition time (s)	---	---	---	---	---	---
Vertical propagation upper 150 mm (yes/no)	no	no	no	no	no	no
Filter paper ignition (yes/no)	no	no	no	no	no	no

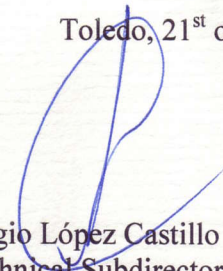
**Observations during the test**

It's appreciated poor, white, grey and light smoke. There isn't combustion persistence or ignition points after the test.

The materials turns yellow colour in the application area of the flame.

Toledo, 21<sup>st</sup> of June of 2006


Fdo: Diana Luengo Rojo  
 Technical Director of LICOF



Fdo: Sergio López Castillo  
 Technical Subdirector of  
 Reaction to Fire Laboratory

# Annexes