

SNPE
Research Center of Bouchet

**CLASSIFICATION REPORT OF A
MATERIAL'S REACTION TO FIRE**

drawn up in accordance with article 88 of the Decree of the
Minister of the Interior of 30 June 1983, modified by the
Decree of 28 August 1991 and its appendices

GOOD FOR 5 YEARS from the date of issuance

No. 7181-96

MATERIAL PRESENTED BY : KEMLITE COMPANY
23525 WEST EAMES STREET
JOLIET, ILLINOIS 60434
U.S.A.

COMMERCIAL BRAND : GLASBORD 2585 PSI.

SUMMARY DESCRIPTION : Rigid flat sheet based on polyester resin (44%),
reinforced with glass fibers (11%) and various binders
and ballast (45%).

Mass per m² : 3325 g
Thickness : 2 mm
Coloration presented: white

NATURE OF THE TESTS : Radiation test.

CLASSIFICATION : M3

DURATION OF THE CLASSIFICATION (Appendix 22) : **not limited a priori.**

Taking into account the criteria resulting from the tests described in the enclosed test report No. :
7181-96

The stated classification does not consider whether the materials marketed will comply with the samples submitted for testing and shall not in any case be taken as a certificate of qualification such as is stipulated by the law of 10 January 1978. This conformity may be attested by the qualification certificates recognized by the Minister responsible for the Industry and, in particular, by the NF-Reaction to fire mark.

LE BOUCHET, 11 OCTOBER 1996

Director, "Fire Testing"
Laboratory

In charge of the test

[signature]
M. MAUNY

[signature]
F. GOVET

SNPE
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**NON PUBLICATION IN THE OFFICIAL JOURNAL
OF A CLASSIFICATION HOMOLOGATION**

(Article R 121-7 of the construction and residential code)

TESTING OF A MATERIAL'S REACTION TO FIRE

REPORT No. 7181-96 OF 11 OCTOBER 1996

- MATERIAL PRESENTED BY** : KEMLITE COMPANY
23525 WEST EAMES STREET
JOLIET, ILLINOIS 60434
U.S.A.
- COMMERCIAL BRAND** : GLASBORD 2585 PSI.
- SUMMARY DESCRIPTION** : Rigid flat sheet based on polyester resin (44%),
reinforced with glass fibers (11%) and various binders
and ballast (45%).
Mass per m² : 3325 g
Thickness : 2 mm
Coloration presented: white
- NATURE OF THE TESTS** : Radiation test.
- CLASSIFICATION** : M3
- DURATION OF THE CLASSIFICATION** (Appendix 22) : **not limited a priori.**

Under the conditions stipulated by the Decree of the Minister of the Interior of 30 June 1983, as modified by the Decree of 28 August 1991 and its appendices.

I, the undersigned, name and office.....

object to the publication (free) in the Official Journal of the above information.

At..., this day...,
for agreement and signature

Note: The present application should be addressed by the holder, and only in case of an objection, signed and dated, to the Minister of the Interior and Regional Management, 1 Place Beauvau 75800 PARIS, within 15 days of the date of issuance of the classification report.

If the present application is not received within this time, the Directorate of Civil Safety will publish the above-indicated information in the JO.

**CLASSIFICATION REPORT OF A
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and 4 pages of appendices

- 1 - **PURPOSE OF THE TESTS** : To subject the material to the action of a source of radiant heat.

- 2 - **ORIGIN AND CHARACTERISTICS OF THE SPECIMENS**
 - 2-1 PRODUCER : KEMLITE COMPANY
JOLIET, ILLINOIS 60434
U.S.A.

 - 2-2 DISTRIBUTOR : KEMLITE COMPANY
23525 WEST EAMES STREET
JOLIET, ILLINOIS 60434
U.S.A.

 - 2-3 COMMERCIAL BRAND : GLASBORD 2585 PSI.

 - 2-4 CHARACTERISTICS ATTESTED BY THE APPLICANT :

Rigid flat sheet based on polyester resin (44%), reinforced with glass fibers (11%) and various binders and ballast (45%).

Mass per m² : 3325 g
Thickness : 2 mm
Coloration presented: white

 - 2-5 CHARACTERISTIC CONFIRMED BY THE LABORATORY :

Mass per m² : around 3250 g

3 - **TEST METHODS AND RESULTS**

- Appendix page 1 : Methods of testing, packaging, classification, durability.
- Appendix page 2 : Result of the tests, tables.
- Appendix page 3 : Observations concerning the tests.
- Appendix page 4 : Photo.

METHODS OF CLASSIFICATION TESTS OF RIGID MATERIALS OR SUCH AS ARE MADE RIGID (GLUE COATINGS), OF ANY THICKNESS, AND FLEXIBLE MATERIALS WITH THICKNESS GREATER THAN 5 MM (EXCEPT FILTER MATERIALS)

1 - TEST BY RADIATION (Articles 26-42)

This test involves subjecting the flat specimens, under the conditions defined, to the action of a source of radiant heat and provoking:

- a) inflammation of the gases released, if any,
- b) a propagation of the combustion.

The specimen (30 cm x 40 cm), arranged at 45°, is subjected to a definite radiation emitted by an electric radiator whose surface is at 30 mm from the plane of the material.

The gases released make contact with igniters arranged on either side of the specimen.

Each test lasts 20 minutes.

2 - SUPPLEMENTARY TESTS

Article 4 and 42: Materials which exhibit a very special behavior during the main test shall be subjected to the supplementary tests described below.

2.1 - Test for fusible materials (articles 43-45)

The specimen (7 cm x 7 cm), arranged on a particular metal grill, is subjected to the radiation of an epiradiator situated 3 cm above it.

For five minutes, the radiator is taken away upon each inflammation, then put back in place after the fire goes out. For five additional minutes, the radiator remains in place.

The determining elements are:

- . presence of droplets, whether or not burning,
- . inflammation of the cellulose wad arranged underneath the specimen.

2.2 - Test for flame propagation (articles 45-46)

The specimen (40 cm x 3.5 cm), arranged horizontally on edge, is subjected to the action of a gas burner flame. The rate of propagation is measured between 2 reference points at a distance of 25 cm or, if there is no propagation of flame, one notes the duration of persistence of flame, the distances of propagation and the falling of drops, whether or not burning.

2.3 - Measurement of the Calorific Power (articles 54-63)

The quantity of heat released by the combustion of a known mass of material is measured, which is ignited in a calorimetric bomb filled with oxygen under pressure.

3 - CONDITIONING OF THE SPECIMENS

The specimens, presented with normal dimensions, are kept in an air conditioned room (23°C +/- 2° C and 50% +/- 5% relative humidity) until the mass is constant. The mass is considered constant when two consecutive weighings at an interval of 24 h do not differ by more than 0.1% or 0.1 g.

4 - CLASSIFICATION OF MATERIALS (Articles 70-76 and 78-87)

This is determined at the end of the radiation test and the supplementary tests, if any. The materials are classified in categories M1, M2, M3 or M4. Only materials for which there is no effective ignition in the radiation test can claim the classification M0.

5 - DURABILITY TESTS (Article 10 and annex 22)

The conditions of these tests, their interpretation, and the classification procedure are defined in chapters II and III of annex 22.

RESULTS OF RADIATION TESTS

SPECIMEN No.	1	2	3	4	Means
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Inflammation

(exposed ti
 (surface te

(nonexposed ti
 (surface te

Total of flame
 heights H (cm)

q = [formula]

Observations

Maximum flame
 length (cm)

(P1 (g)

(

(

(S (cm²)

ti : time of inflammation.
 te : time of extinction.
 H : total flame heights.
 T : total time of combustion.

P1 : stabilized weight of the specimen.
 S : surface deteriorated after testing.

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4 - OBSERVATIONS CONCERNING THE RADIATION TESTS

Four specimens were tested.

Each time, there was inflammation on the two surfaces of the material.
The mean of the 4 indices q is equal to 31.7.

LE BOUCHET, 11 OCTOBER 1996

Director, "Fire Testing"
Laboratory

[signature]
M. MAUNY