

SNPE
Research Center of Le Bouchet

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Le Bouchet
91710 Vert-le-Petit, France
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**REPORT ON CLASSIFICATION
OF THE REACTION TO FIRE OF A MATERIAL**

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 issue

No. 6670-95

MATERIAL PRESENTED BY:

KEMLITE COMPANY
23525 WEST EAMES STREET
CHANNAHON, ILLINOIS 60410
U.S.A.

COMMERCIAL BRAND

GLASBORD 385 PWI.

SUMMARY DESCRIPTION:

Flat rigid board based on polyester resin (29%),
reinforced with glass fibers (21%) and various
bonders and ballast (50%).

Mass per m²: 3036 g

Thickness: 2.3 mm

Coloration: white

Appearance: one smooth surface, one embossed
surface.

NATURE OF THE TESTS:

Radiation test

CLASSIFICATION:

m3

DURABILITY 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. 6670-95.

The indicated classification makes no judgement as to the compliance of the materials
that are marketed with the samples submitted for the tests and in no case can be

considered a certificate of qualification such as is defined by the law of 10 January 1978. Said compliance may be attested by the qualification certificates recognized by the Minister of Industry and, in particular, by the brand NF-Reaction to Fire.

Le Bouchet, 22 September 1995

Head of the Laboratory
"Fire Test"

Director of Testing

[signature]
M. MAUNY

[signature]
F. COVET

Note: only complete and photocopy reproductions of the present classification report or the combined classification report and enclosed test report are permitted.

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**NONPUBLICATION IN THE OFFICIAL JOURNAL
OF A CLASSIFICATION APPROVAL**

(Article R 121-13 of the Construction and Residence Code)

TEST OF REACTION TO FIRE OF A MATERIAL

REPORT No. 6670-95 OF 22 SEPTEMBER 1995

MATERIAL PRESENTED BY:

KEMLITE COMPANY
23525 WEST EAMES STREET
CHANNAHON, ILLINOIS 60410
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COMMERCIAL BRAND

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Radiation test.

CLASSIFICATION:

m3

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

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

I, the undersigned, name and position ...

oppose the publication (free of charge) in the Official Journal of the above items.

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

Note: The present application should be signed and dated and sent by the holder and

only in event of opposition to the Minister of the Interior and Regional Planning, 1 Place Beauvau 75800 PARIS, within 15 days of the date of issue of the report.

If the present application is not received within this period, the Office of Civil Safety will have the above-indicated items published in the OJ.

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REQUEST FOR CLASSIFICATION APPROVAL

(Article R 121-7 of the Construction and Residence Code)

TEST OF REACTION TO FIRE OF A MATERIAL

REPORT No. 6670-95 OF 22 SEPTEMBER 1995

MATERIAL PRESENTED BY:

KEMLITE COMPANY
23525 WEST EAMES STREET
CHANNAHON, ILLINOIS 60410
U.S.A.

COMMERCIAL BRAND

GLASBORD 385 PWI.

SUMMARY DESCRIPTION:

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NATURE OF THE TESTS:

Radiation test.

CLASSIFICATION:

m3

DURABILITY OF THE CLASSIFICATION (Appendix 22):

not limited a priori.

Under the conditions specified by the Decree of 30 June 1983, modified by the Decree of 28 August 1991 and its appendices.

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

Note: The present application should be signed and dated and sent to the Minister of the Interior and Regional Planning, 1 Place Beauvau 75800 PARIS, within 15 days of the date of issue of the report.

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**TEST REPORT
OF THE REACTION TO FIRE OF A MATERIAL**

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 issue

No. 6670-95
and 4 pages of appendices

1 - PURPOSE OF THE TEST: To subject the material to the action of a source
of radiating heat.

2 - ORIGIN AND CHARACTERISTICS OF THE SAMPLES

2 - 1 PRODUCER: KEMLITE COMPANY
CHANNAHON, ILLINOIS 60410
U.S.A.

2 - 2 DISTRIBUTOR: KEMLITE COMPANY
23525 WEST EAMES STREET
CHANNAHON, ILLINOIS 60410
U.S.A.

2 - 3 COMMERCIAL BRAND: GLASBORD 385 PWI.

2 - 4 CHARACTERISTICS ATTESTED BY THE APPLICANT:

Flat rigid board based on polyester resin (29%), reinforced with glass fibers
(21%) and various bonders and ballast (50%).

Mass per m²: 3036 g
Thickness: 2.3 mm
Coloration: white

2 - 5 CHARACTERISTIC VERIFIED BY THE LABORATORY:

under pressure.

3 - CONDITIONING OF THE SPECIMENS

The specimens presented, of normal dimensions, are kept in a conditioned room (23 °C +/-2 °C and 60% +/-5% relative humidity) until the mass is constant. The mass is considered constant when two consecutive weighings at 24 h interval do not differ by more than 0.1% or 0.1 g.

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

This is based on the radiation test and, if applicable, the supplementary tests. The materials are classified in category M1, M2, M3 or M4. Only materials for which there is no effective ignition during the radiation test can claim a classification of M0.

5 - DURABILITY TESTS (Article 10 and Appendix 22)

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

Mass per m³: around 3200 g.
Appearance: one smooth surface, one embossed surface.

3 - TEST METHODS AND RESULTS

Appendix page 1:	Test methods, conditioning, classification, durability.
Appendix page 2:	Test result, tables
Appendix page 3:	Remarks on the tests.
Appendix page 4:	Photo.

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Test Report No. 6670-95
Appendix page 3

4 - OBSERVATIONS CONCERNING THE RADIATION TESTS

Four specimens were tested.

Each time, there was ignition at the two surfaces of the material.
The average of the 4 indices q is equal to 38.1.

LE BOUCHET, 22 SEPTEMBER 1995

Head of the Laboratory
"Fire Test"

[signature]
M. MAUNY

TEST METHODS FOR CLASSIFICATION OF RIGID MATERIALS OR MATERIALS RENDERED SUCH (GLUED CLADDING) OF WHATEVER THICKNESS AND FLEXIBLE MATERIALS OF THICKNESS LARGER THAN 5 MM (EXCEPT FILTER MEDIA).

1 - RADIATION TESTING (Articles 26-42)

This test consists in subjecting the flat specimens, under the specified conditions, to the action of a source of radiating heat and inducing:

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

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

The gases released come into contact with igniters arranged on either side of the specimen. Each test takes 20 minutes.

2 - SUPPLEMENTARY TESTS

Articles 4 and 42: Materials which exhibit a very special behavior during the primary test are subjected to the supplementary tests described hereafter.

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

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

For the course of five minutes, the radiator is removed each time inflammation occurs and then put back after extinction.

For an additional five minutes, the radiator remains in place.

The determining elements are:

- presence of droplets, whether or not on fire,
- ignition of the cellulose wadding arranged underneath the specimen.

2.2 - Flame propagation test (Articles 46-48)

The specimen (40 cm x 3.5 cm), arranged horizontally on edge, is subjected to the action of the flame of a gas burner. One measures the rate of propagation between two reference points at 25 cm distance or, in the case of nonpropagation of the flame, one notes the time of persistence of the flame, the propagation distances and the dripping of drops, whether or not on fire.

2.3 - Measurement of the caloric power (Articles 54-63)

One measures the amount of heat given off by the combustion of a known mass of material, which is ignited in a calorimetric bomb filled with oxygen

RESULTS OF THE RADIATION TESTS

[table]

[column headings]

SPECIMEN NO. / 1 / 2 / 3 / 4 / Average

Inflammation

(surface ti
(exposed te

(surface not ti
(exposed te

Total of flame
heights H (cm)

[equation]

Observations

Maximum flame
length (cm)

(P1 (g)
(
(
(S (cm²)

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

P1: stabilized weight of the specimen
S: surface deteriorated after test

key:
puis = then