

CLASSIFICATION REPORT

(free translation of French test report N° J031273 – CEMATE/2)
established according to the article 5 of the Department State Order dated on
21 november 2002.

VALIDITY 5 YEARS FROM 28 November 2008

N° J031273 - CEMATE/4

And appendix of 4 pages

Material submitted by : ISOFLEX AB
Soldatvägen 1
78350 GUSTAFS
SUEDE

Commercial trademark : MONIFLEX MXP

Brief description :

Global composition : Panel made up of cast cellulose diacetate plasticized, fireproofed in mass, glued on a 50 mm rock wool panel, covered with an aluminium foil.

End-use : Insulation in roof, floor and walls, in passenger trains.

Mass : (2) kg/m²

Thickness : (80 ± 2) mm

Colour : Transparent colorless and aluminium

Test report : N° J031273 - CEMATE/4 dated on 28 November 2008

Type of tests : Heat radiation test, saw cut.

Classification :

M1

Durability of classification (appendix 22) : UNLIMITED A PRIORI

In view of criteria resulting from the tests described in the appended Test Report N° J031273 - CEMATE/4

The indicated classification prejudices in no way the conformity of the materials commercialized to the samples submitted to the tests and can in no way be considered as a certificate of qualification.

This is not a product certification according to the L115-27 article of the consumption code and to the law dated on 3rd june 1994.

Note : Only full reproduction and by photocopy of the present classification report or the whole classification report and the appended lost report are authorized

Trappes, 28 November 2008

The Head of the
Fire Behaviour Division



Alain SAINRAT

Test officer
Emilie COLIN

Responsible for Test



Guillaume LE GOFF



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TEST REPORT

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Established according to the article 5 of the department State Order dated on
21 november 2002.

VALIDITY 5 YEARS FROM 28 November 2008

N° J031273 - CEMATE/4

And appendix of 3 pages

1. PURPOSE OF TEST

The purpose of tests to which this report relates is to determine the classification of materials, in accordance with the stipulations in the order from the Ministère de l'Intérieur, dated 28 August, 1991 relating to their reaction to fire.

2. SAMPLES SUBMITTED

Test sponsor	:	ISOFLEX AB
Date of order	:	Fax dated on 04/04/2008
Producer	:	ISOFLEX AB
Distributor	:	
Commercial trademark and reference	:	MONIFLEX MXP
Characteristics attested by sponsor	:	
Global Composition	:	Panel made up of cast cellulose diacetate plasticized, fireproofed in mass, glued on a 50 mm rock wool panel, covered with an aluminium foil.
Mass	:	(2) kg/m ²
Thickness	:	(80 ± 2) mm
Colours	:	Transparent colorless and aluminium
Characteristics observed by LNE	:	Conform to those attested by sponsor
Global composition	:	Not controlled
DSC's keyword	:	

3. TEST PROCEDURES AND RESULTS

Appendix page 2	:	Test procedures, conditioning, classification, ageing.
Appendix page 3	:	Results.
Appendix page 4	:	Observations about tests, conclusion and classification.

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For any difficulties in the interpretation of this document, please refer to original text
in French (dossier N° J031273 – CEMATE/2) which is the only authentic one.
It contains 4 pages.

APPENDIX PAGE 2

**TEST PROCEDURES AND CLASSIFICATION ON TENSE MATERIALS OR MADE SUCH (STICKED)
OF ALL THICKNESS AND FLEXIBLE MATERIALS WITH THICKNESS HIGHER THAN 5 MM (EXCEPT
FILTERING MEDIA)**

1. MAIN TEST(S)

HEAT RADIATION TESTS (APPENDICES 26 to 42)

These test consist in submitting the samples, in clearly defined conditions, to the actions of a radiating heat source and producing :

- ignition of the released gases, if it occurs,
- flame propagation.

The sample (30x40 cm) inclined at 45° is submitted to a clearly defined radiation, emitted by an electric radiator, whose surface is 30 mm below the surface of the test sample. The released gases pass in contact with gas ignitors located on either side of the test sample. The duration of the test is 20 minutes.

SPREAD OF FLAME TEST:

The standardized sample is set vertically and the propane burner flame is applied on its bottom edge. The speed of spread of flame is measured between 2 marks on a distance of 25 cm along the test sample. In case of no spreading, time of flame persistence, destroyed area and fallinif falming droplets are observed.

DROP TEST

The sample is set horizontally on a grid , under the heat radiant source, whose surface is placed 30 mm above the sample.

During 5 minutes, the heat source is moved from the sample in case of ignition, and re-applied when it extinguishes .

During the 5 last minutes, the heat source stays above the samples. Ignition of cotton, set 30 cm beneath the gris, by flaming or non flaming droplets is considered

2.SAMPLES CONDITIONING

The samples submitted with normal dimensions are kept in a conditioned enclosure (23 ± 2 °C and 50 ± 5 % RH) until their mass has stabilized. The mass is considered as stabilized when 2 succesives weighings over 24 h do not differ more than 0,1 % or 0,1g.

3. CLASSIFICATION OF MATERIALS (APPENDICES 70 to 87)

It is established according to the above test. Combustible materials are classified M1, M2, M3, M4.

Only those materials classified M1 without no effective ignition during the heat radiant test can claim to the M0 classification.

4. DURABILITY (APPENDIX 22)

ACCELERATED AGEING (APPENDIX 22, Article 10)

The samples are submitted during 2 monthes in an alternative conditioned enclosure and kept in relative humidity variations included between 15% and 90 % (the duration of each humidity period is 4 weeks).

INJECTION-EXTRACTION (APPENDIX 22, Article 27 and 30)

The sample settled on its substract is submitted 20 times to the injection-extraction applicator, before conditioning (§3 above).

The test report is following next page

APPENDIX PAGE 3

5. TESTS RESULTS

Heat radiation tests

Thickness : 10 mm	Sample 1	Sample 2	Sample 3	Sample 4	
Time of 1st ignition exposed side (ti1)	-	-	193	-	
Time of 1st ignition unexposed side (ti2)	-	-	-	-	
Sum of flame heights (cm) $\sum H$	0	0	124	0	
Sum of effective burning periods $\sum \Delta T$	0	0	125	0	
$q = \frac{100 \cdot \sum H}{ti \sqrt{\sum \Delta T}}$	0	0	5.75	0	Average = 1.44
Non flaming drops	No	No	No	No	
Flaming drops	No	No	No	No	

The test report is following next page

APPENDIX PAGE 4

6. OBSERVATIONS ABOUT TESTS

Established according to article 6, the samples were tested with saw cut on aluminium side and edges draughtproofing.

Receipt of samples : June 2008

End of tests : 07/03/2008

7. CONCLUSION AND CLASSIFICATION

In view of the results, the material with the characteristics described in the first page of this test report has the classification

M1

8. CLASSIFICATION DURABILITY

Unlimited *a priori*

Trappes, 28 November 2008

The Head of the
Fire Behaviour Division



Alain SAINRAT



Test officer
Emilie COLIN

Responsible for Test



Guillaume LE GOFF

Attention is attracted to the fact that the results obtained with the samples described in the present test report are not generalizable without justification of the representativity of samples and tests.