



TECHNICAL REPORT

**Factory-made boards
and products formed
by moulding of an expanded
polylactic acid (EPLA)
for thermal and / or
acoustical insulation**

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**FACTORY-MADE BOARDS AND PRODUCTS
FORMED BY MOULDING OF AN EXPANDED
POLYLACTIC ACID (EPLA) FOR THERMAL AND /
OR ACOUSTICAL INSULATION**

**Testing procedure for:
Determination of resistance to mould fungus**

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Foreword

EOTA Technical Reports are developed as supporting reference documents to European Technical Approval Guidelines and can also be applicable to a Common Understanding of Assessment Procedures, an EOTA Comprehension Document or an European Technical Approval, as far as reference is made therein.

EOTA Technical Reports go into detail in some aspects and express the common understanding of existing knowledge and experience of the EOTA bodies at a particular point in time.

*Where knowledge and experience is developing, especially through approval work, such reports can be amended and supplemented.
When this happens, the effect of the changes upon the European Technical Approval Guidelines will be laid down in the relevant comprehension documents, unless the European Technical Approval Guideline is revised.*

This EOTA Technical Report has been prepared by the approval body Kiwa to define testing procedures in support of the CUAP 12.01/39: “factory-made boards and products formed by moulding of an expanded polylactic acid (EPLA) for thermal and/ or acoustical insulation”.

A. Determination of resistance to mould fungus

A.1 Principle

A test specimen is exposed for a defined period of time at a constant temperature to a high moisture climate.

After this period of time the test specimen is visually inspected for the presence of mould fungus.

A.2 Apparatus

A.2.1 Desiccator, of sufficient size, that can contain a test specimen of 50 mm x 20 mm x 30 mm.

A.2.2 Cage made of stainless steel with an internal volume of approx. 0,05 liters for the test specimen.

A.3 Test specimen

The shape and dimensions of the test specimen shall be according clause 6.1 of EN ISO 846 and shall be cleaned according clause 7.1 of EN ISO 846

A.4 Testing conditions

The exposure shall be performed at a constant temperature of $(23 \pm 2)^\circ\text{C}$.

Note: *This constant temperature is necessary to avoid any condensation during the exposure period.*

A.5 Procedure

- The desiccator is filled at the bottom with water;
- The test specimen is then put in the desiccator, taking care that no part of the test specimen can come into contact with the water;
- The desiccator is then closed tightly and put in the temperature-conditioned room for a period of four weeks;
- After four weeks the desiccator is opened and the test specimen is cleaned according to clause 9.2.1 of EN ISO 846.
- The cleaned test specimen is then visually inspected on the presence of mould fungus according to EN ISO 846 clause 9.1 and classified according table 4.

A.6 Expression of results

- The presence of mould fungus is expressed in classes of intensity of growth according to table 4 of EN ISO 846.

A.7 Reference

EN-ISO-846: 1997 Plastics - Evaluation of the action of microorganisms.