
**Building and civil engineering
sealants — Assessment of the fungal
growth on sealant surfaces**

*Mastics pour le bâtiment et le génie civil — Évaluation de la
croissance fongique à la surface des mastics*



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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 8, *Sealants*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Sealants used in high humidity environments experience growth of microorganisms; and it can be necessary to test the function of sealant under normal service conditions to ensure that the sealant surface remains free of the growth microorganisms over a designated function period. This test is designed to evaluate the 5 most common strains of microorganisms found on sealant surfaces.

Building and civil engineering sealants — Assessment of the fungal growth on sealant surfaces

1 Scope

This document specifies a method for the evaluation of the fungal growth on sealants which are used in joints in building construction.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6927, *Building and civil engineering sealants — Vocabulary*

ISO 846, *Plastics — Evaluation of the action of microorganisms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6927 and ISO 846 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Apparatus

4.1 Incubators, used for tests involving fungal attack, shall be capable of controlling the temperature to ± 1 °C at any temperature from 20 °C to 35 °C. A relative humidity of 90 % or greater one needs to be ensured during incubation.

4.2 Oven, capable of controlling the temperature at (45 ± 2) °C for drying test specimens.

4.3 Water bath or ventilated oven, capable of being controlled at (50 ± 1) °C for heating the specimen during the water immersion.

4.4 Autoclave, capable of maintaining a temperature and pressure of (120 ± 2) °C and 2 bar, respectively, for sterilizing Petri dishes.

4.5 Analytical balance, accurate to 0,1 mg.

4.6 Laboratory centrifuge.

4.7 Stereoscopic microscope, magnification $\times 50$.

4.8 Glass or plastic disposable Petri dishes, of suitable size for exposing test specimens.