

## 5. Antifungal Potency Evaluation Test Methods for Antifungal Products (2014 Version)

### 1. Outline

These test methods shall be applied to antifungal potency tests for antifungal products conferred with an antifungal function (hereinafter referred to as products).

Detailed procedures shall be in accordance with the procedures specified for the individual test methods.

### 2. Choice of Test Method

Out of the test methods for antifungal products shown in the table below, an appropriate test method befitting the subject material and intended use shall be chosen. Specifically, a test method allowing fungal growth rated to be grade “1” or higher by the rating criteria shown in section 3 below shall be applied.

Table. Test methods for antifungal products

Subject		Test method	Culture medium used	Spore suspension	Pretreatment
Level	Example subjects				
A <sup>1</sup>	Plastics	JIS Z 2911 Appendix A: Method B	Glucose and others	Glucose and others	None
	Electrical/electronic products	JIS Z 2911 Appendix B: Test Method 2	None	Distilled water	Sucrose
	Paints	JIS Z 2911 8: Paints	Sabouraud medium	Distilled water	Others
	Leather and leather products	JIS Z 2911 9: Leather	PDA	Distilled water	None None
B	Plastics	JIS Z 2911 Appendix A: Method A	Inorganic salts	Inorganic salts	None
	(Textiles)	JIS Z 2911 7: Wet test method for textiles	Inorganic salts	Distilled water	None
	Synthetic polymer materials	ASTM G21-09	Inorganic salts	Inorganic salts	None
	Optical parts and equipment	JIS Z 2911 Appendix C	None	Inorganic salts	None
C	Products for general industrial use	JIS Z 2911: General industrial products	None	Distilled water	None
	(Textiles)	JIS Z 2911 7: Dry test method for textiles	None	Distilled water	None
	Electric and electronic products	JIS Z 2911 Appendix B: Test Method 1	None	Distilled water	None

Note : JIS Z 2911 be tested in 2010 version

<sup>1</sup> If the mold growth rating for an untreated product is “0” even when determined by a level-A test method, the following methods may be applied.

- 1) Add glucose to the spore suspension. (Applied mainly to leather and paints, or in cases where no growth is observed by the test method of Appendix B)
- 2) Increase the dose of the spore suspension. (Applied mainly in cases where no growth is observed by the test method of Appendix A)
- 3) The sample may be subjected to pretreatments such as water immersion, hot water immersion, and neutralization as required.

### 3. Rating Criteria

Different procedures are specified for respective test methods. Whatever the test method chosen, however, judgment shall be made using the following rating criteria. All these determinations shall be made by visual examination.

#### Rating criteria

0: No hypha growth is observed in the inoculation portion of the sample or test piece.

1: The area of the hypha growth in the inoculation portion of the sample or test piece does not exceed one third of the total area.

2: The area of the hypha growth in the inoculation portion of the sample or test piece exceeds one third of the total area.

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