

ICS 79.020
CCS B 60

LY

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

LY/T 1283-1998

Replacing LY/T 1283-1998

**Method of laboratory test for toxicity of wood preservatives to
decay fungi
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces LY/T 1283-1998 "Laboratory Test Method for Toxicity of Wood Preservatives to Decaying Fungi", and LY/T 1283-1998 in comparison, the main technical changes are as follows.

- The scope is specified in detail.
- Cancel the restrictions on "wood" in terms and definitions, and modify the "preservative retention" to "preservative loading".
- Modify the maltose concentration unit and replace the Baume unit with g/L.
- Delete the "coniferous material sample for brown rot fungus test, hardwood sample for white rot fungus test" provisions, changed to "new preservatives at least A brown rot fungus and a white rot fungus are tested for decay."
- Increase the "in addition to the standard test bacteria, you can also use other strains that are more resistant to the control sample".
- Add at the end of the decay test "After 12 weeks of decay, start investigating the control sample without drug treatment, only the quality of the control sample. Only when the loss rate meets the requirements, the other drug treatment samples can be taken out. Generally, the longest time can be extended to 18 weeks. If 18 weeks when the quality loss rate is not up to the requirement, it is recommended to change other strains or reference materials and find out if there is any problem in the experiment."

Provisions.

- Increase the "average mass loss rate of sapwood of different control tree species by different strains".

This standard is proposed and managed by the National Timber Standardization Technical Committee (SAC/TC41).

1 Scope

This standard specifies the wood caused by the infection of preservative-treated wood by decaying bacteria under the most suitable laboratory conditions.

Material quality loss, determine the preservative tested to effectively prevent the selected amount of decaying bacteria from decaying the treated wood (ie toxic Method of limit). The toxicity limit of this preservative measured by this method can be regarded as the preservative above the ground (including contact with the ground) the minimum drug loading that should be achieved in field trials.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 14091 wood anti-corrosion terminology

3 Terms and definitions

The following terms and definitions as defined in GB/T 14091 apply to this document.

Mass loss percentage weightlosspercentage Percentage loss of quality of wood treated with preservatives after infection by decaying bacteria in an indoor toxicity test.

Preservative retention the number of kilograms of active ingredient of the preservative absorbed per cubic meter of treated wood.

Preservative toxicity limit toxiclimitofpreservatives Preservatives effectively inhibit the minimum drug loading of decaying wood.

4 Test equipment

4.1

Incubation chamber or constant temperature and humidity incubator. temperature $28\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$, relative humidity 75% ~ 85%.

4.2

Blast drying oven. temperature $103\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$.

4.3

Steam sterilizer. pressure 0.25MPa, temperature $138\text{ }^{\circ}\text{C}$.

4.4

Sterile inoculation room or ultra clean bench.

4.5

Analytical balance. accuracy 0.01g.

4.6

Vacuum pump. Relative vacuum -0.09MPa.

4.7

Petri dish. glass, 6cm or 9cm in diameter.

4.8

Culture flask. 500mL wide-mouth glass conical flask or wide-mouth round cap bottle with screw cap and filter hole (minimum volume 250mL, minimum diameter) 32mm, screw cap can be sterilized).