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

GB/T 14074.1-1993

**Testing methods for wood adhesives and their resins
(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 GB/T 14074-2006 "wood adhesives and resin testing methods." this standard compared with GB/T 14074-2006, the main technical changes are as follows.

--- Modify the determination of the gel time and the use of formaldehyde free formaldehyde test range (see Chapter 1);

--- Modify the viscosity of the constant temperature bath temperature (see 3.3.3.2);

- Modify the principle of pH determination (see 3.4.1);
- Modify the determination of water mixed determination of the conditions (see 3.6.1);
- Replace the curing time determination of the instruments and devices (see 3.7.1);
- gluing strength and internal bonding strength increased in the determination of three types of plywood bonding strength and test pieces and strength test (See 3.10.1);
- "bond strength and internal bond strength test report added" tree species "(see 3.10.3);
- Modify the determination of free phenol and hydroxymethyl content of Na₂S₂O₃ standard solution concentration (see 3.13.3.6 and 3.17.3.4);
- Revised phenolic resin in the determination of free formaldehyde content of reagents and solutions, equipment and procedures for the operation (see 3.16.1);
- Modify the urea formaldehyde, melamine modified urea formaldehyde resin free formaldehyde content determination formula (see 3.16.2.5.1).

This standard proposed by the State Forestry Administration.

This standard by the National Panel Standardization Technical Committee (SAC/TC198) centralized.

This standard was drafted unit. South China Agricultural University, Guangzhou Changan viscose Manufacturing Co., Ltd., Guangzhou City, good good decorative materials limited Company, Linyi Xin Yan Chemical Co., Ltd., Guangzhou Guanghe Adhesives Co., Ltd., Tak Wah Bunny New Decoration Materials Co., Ltd., Zhejiang Sheng Huayunfeng new material Co., Ltd., Deqing County Yunfeng Central good Technology Co., Ltd., Henan Yongwei Security Co., Ltd., Zhejiang Liangyou Mu Industry Co., Ltd.

1 Scope

This standard specifies the timber industry adhesives and resin testing methods.

This standard 3.1,3.2,3.3,3.4,3.5 for wood adhesives used in industrial adhesives melamine modified urea-formaldehyde resin, phenolic resin, trimerization Cyanamide formaldehyde resin - Determination of appearance, density, viscosity, pH value and solid content.

This standard 3.6 for wood adhesives for industrial use water-soluble phenolic resin and melamine modified urea-formaldehyde resin water mixed Determination.

This standard 3.7, 3.8, 3.17, 3.18 for wood industrial adhesives with melamine modified urea-formaldehyde resin curing time, apply Determination of hydroxymethyl content and precipitation temperature.

This standard 3.9 is suitable for the determination of the storage stability of melamine modified urea-formaldehyde resin and phenolic resin for wood industrial adhesives.

This standard 3.10.1 applies to the wood industry adhesive with melamine modified urea-formaldehyde resin, phenolic resin produced plywood glue Determination of cohesion; 3.10.2 of this standard is applicable to the wood industry adhesive with urea-formaldehyde resin and phenolic resin production of medium density fiberboard and particleboard internal bond strength determination.

This standard 3.11 is applicable to the determination of moisture content of alcohol-soluble phenolic resin for wood industrial adhesives.

3.12 of this standard is applicable to the determination of soluble and low melting point phenolic resin gel time for wood industrial adhesives; not suitable for the gel time is too short, such as phenolic resin powder, phenolic resin can not be self-curing resin and contains a large number of low-boiling point solvent tree Determination of lipid gel time. The gel time in the presence of a catalyst can be determined. The catalyst can be added in a fixed ratio, the use of catalytic Agent Curing Gel Time The type of curing agent used and sample handling methods should be described in the report.

This standard 3.13 is applicable to the determination of free phenol content of phenolic resin used in wood industrial adhesives.

This standard 3.14 is applicable to the determination of the content of bromide in water-soluble phenolic resin for wood industrial adhesives.

This standard 3.15 is applicable to the determination of the alkali content of water-soluble phenolic resin used in wood industrial adhesives.

This standard 3.16.1 applies to the wood-based industrial adhesives free formaldehyde content of not more than 15% of the formaldehyde free formaldehyde Determination of the amount.

This standard 3.16.2 applies to the determination of free formaldehyde content of urea formaldehyde and melamine modified urea formaldehyde resin for wood industrial adhesives, this method is not applicable to the determination of free formaldehyde content of phenolic resin modified furan resin.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Particleboard GB/T 4897-2015 General principles of sampling of chemical products GB/T 6678-2003 General principles of sampling for liquid chemical products GB/T 6680-2003 Laboratory use specifications and test methods for analysis GB/T 6682-2008 GB/T 9724-2007 Chemical reagents - Determination of pH GB/T 9846-2015 ordinary plywood Medium density fiberboard Testing methods of physical and chemical properties of wood -

based panels and veneer wood - based panels