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LY

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

LY/T 1453-1999

Replacing LY/T 1453-1999

**Terpene resin
(English Translation)**

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Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Technical requirements
- 5 Test methods
- 5.1 Determination of softening point (ring and ball method)

Foreword

This standard is a revision of LY/T 1453-1999 "terpene resin".

Compared with LY/T 1453-1999 (formerly ZBB72007-1988), the main changes are as follows.

- Added terms and definitions;
- Revised the specific values of the color indicators in the standard, and improved the requirements for product quality;
- Revised the standard toluene insolubles index, and improved the quality requirements for special grades;
- Change the method of determining the softening point and color to direct reference;
- Another measure to increase the color of the product.
- Modified the unit symbol of the acid value;
- Modified the unit symbol of the saponification value;
- Increase the unit symbol of iodine value;
- Amend the regulations of the inspection rules;
- Added batch division;
- Modified the sampling method description, using a table instead of a text description;
- In the logo to specify the identification method of the batch number, making the product traceable;
- Revised the specific requirements for arbitration, more operability.

This standard was proposed by the Science and Technology Department of the State Forestry Administration.

This standard is under the jurisdiction of the Institute of Forest Products and Chemical Industry of the Chinese Academy of Forestry.

1 Scope

This standard specifies the technical requirements, test methods, inspection rules, and packaging, marking, transportation and storage of terpene resins.

This standard applies to terpene resins prepared from the grades of turpentine or alpha-pinene in terpene resins as defined in Chapter 3.

2 Normative references

The terms in the following documents become the terms of this standard by reference to this standard. All dated references, followed by all Modifications (not including errata content) or revisions do not apply to this standard, however, parties to agreements based on this standard are encouraged to study if it is possible to use the latest version of these files? For undated references, the latest edition applies to this standard.

GB/T 1722-1992 Method for determination of varnish, clear oil and thinner GB/T 8146-2003 Rosin test method

3 Terms and definitions

The following terms and definitions apply to this standard.

Terpene resin prepared from turpentine oil or terpene such as alpha-pinene, beta-pinene or limonene is light yellow transparent brittle it is soluble in organic solvents such as benzene, toluene and turpentine. It is insoluble in water, methanol and ethanol. The chemical formula is (C₁₀H₁₆), and the average phase the molecular mass is 650~1250.

4 Technical requirements

Terpene resin is divided into special, first and second grade according to the color and toluene insoluble content, and each grade is divided into T-80, T-90, T-100, T-110 according to softening point.

T-120 five specifications. The technical indicators of different specifications of products should meet the requirements of Table 1, and the softening point range meets the requirements of Table 2.

Table 1 Terpene resin technical indicators

level

colour/

Ghana color

Softening Point

(Universal Law)/°C

Acid value /

(mg/g)

Saponification value /(mg/g) Iodine value /(mg/g) Toluene insolubles/% Special 5 Level 1
Level 9 80 1.0 1.5 400-750 0.04 0.05 0.05

Table 2 Softening point requirements for different specifications

Product specifications T-80 T-90 T-100 T-110 T-120 Softening point/° C >= 80 90 100 110
120

5.1 Determination of softening point (ring and ball method)

According to the method in Chapter 4 of GB/T 8146-2003.