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

YC/T 242-2020

**Tobacco flavorings - Determination of ethanol, 1, 2-propylene
glycol and glycerol - Gas chromatography method
(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 YC/T 242-2008 "Gas Chromatography Method for the Determination of Ethanol, 1,2-Propanediol and Glycerol Content in Cigarette Flavors", and Compared with YC/T 242-2008, the main technical changes except for editorial changes are as follows.

- Modified the extraction solution (see 4.2, 4.7, 4.8, 4.2, 4.7, 4.8 in the 2008 edition);
- Modified the scope and preparation of the standard working solution (see 4.9, 4.9 of the 2008 edition);
- Modified the chromatographic column (see 5.2);
- Modified the sample processing conditions (see 5.4, 5.5, 6.1, 7.3.1 of the 2008 edition);
- Added a blank test (see 6.2);
- Modified the chromatographic conditions (see 6.3, 7.1 of the 2008 edition);
- Revised the calculation and expression of results (see Chapter 7, Chapter 8 of the 2008 edition).

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This standard was proposed by the State Tobacco Monopoly Administration.

This standard is under the jurisdiction of the National Tobacco Standardization Technical Committee Tobacco Materials Subcommittee (SAC/TC144/SC8).

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1 Scope

This standard specifies the gas chromatography method for the determination of ethanol, 1,2-propanediol and glycerol in tobacco flavors.

This standard applies to the determination of ethanol, 1,2-propanediol and glycerol content in tobacco flavors.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article. For undated references, the latest version (including all amendments) applies to this document.

GB/T 6682 Analytical laboratory water specifications and test methods

3 Principle

A gas chromatograph equipped with a hydrogen flame ionization detector was used to determine the ethanol, 1,2-propanediol and glycerol in the diluent, and the internal standard method was used for quantification.

4.1 Water

It should meet the requirements of Grade 3 water in GB/T 6682.

4.2 Methanol

Chromatographically pure.

4.3 Ethanol

Purity $\geq 99.5\%$.

4.4 1,2-Propanediol

Purity $\geq 99.5\%$, should be stored in a desiccator.

4.5 Glycerol

Purity $\geq 99.5\%$, should be stored in a desiccator.

4.6 1,4-Butanediol (internal standard) Purity $\geq 99.5\%$, should be stored in a desiccator.