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

GB/T 2910.5-2009

**Textiles -- Quantitative chemical analysis -- Part 5: Mixtures of
viscose, cupro or modal and cotton fibers (method using
sodium zincate)**

纺织品 定量化学分析 第5部分：粘胶纤维、铜氨纤维或莫代尔纤维与棉的混合物(锌酸钠法)

(English Translation)

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Foreword

GB/T 2910 "Textiles-Quantitative Chemical Analysis" consists of the following parts.

- Part 1. General principles of testing;
- Part 2. Ternary fiber mixtures;
- Part 3. Mixtures of acetate and certain other fibers (method using acetone);
- Part 4. Mixtures of certain protein and certain other fibers (method using hypochlorite);
- Part 5. Mixtures of viscose, cupro or modal and cotton fibers (method using sodium zincate);
- Part 6. Mixtures of viscose or certain types of cupro or modal or lyocell and cotton fibers (method using formic acid and zinc chloride);
- Part 7. Mixtures of polyamide and certain other fibers (method using formic acid);
- Part 8. Mixtures of acetate and triacetate fibers (method using acetone);
- Part 9. Mixtures of acetate and triacetate fibers (method using benzyl alcohol);
- Part 10. Mixtures of triacetate or polylactide and certain other fibers (method using dichloromethane);
- Part 11. Mixtures of cellulose and polyester fibers (method using sulfuric acid);
- Part 12. Mixtures of acrylic, certain modacrylics, certain chlorofibers, certain

elastanes and certain other fibers (method using dimethylformamide);

- Part 13. Mixtures of certain chlorofibers and certain other fibers (method using carbon disulfide/acetone);

- Part 14. Mixtures of acetate and certain chlorofibers (method using acetic acid);

- Part 15. Mixtures of jute and certain animal fibers (method by determining nitrogen content);

- Part 16. Mixtures of polypropylene fibers and certain other fibers (method using xylene);

- Part 17. Mixtures of chlorofibers (homopolymers of vinyl chloride) and certain other fibers (method using sulfuric acid);

- Part 18. Mixtures of silk and wool or hair (method using sulfuric acid);

- Part 19. Mixtures of cellulose fibers and asbestos (method by heating);

- Part 20. Mixtures of elastane and some other fibers (method of using dimethylacetamide);

Textiles - Quantitative chemical analysis - Part 5.

Mixtures of viscose, cupro or modal and cotton fibres
(method using sodium zincate)

1 Scope

This part of GB/T 2910 specifies a method, using sodium zincate, to determine the percentage of viscose, cupro or modal fibre, after removal of non-fibrous matter, in textiles made of binary mixtures of

- viscose or most of the current cupro or modal fibres, and
- raw, scoured, kiered or bleached cotton.

Where a cupro or modal fibre is present, a preliminary test should be carried out to see whether it is soluble in the reagent.

This part is not applicable to the mixtures in which the cotton has suffered extensive chemical degradation. It is also not applicable to viscose, cupro or modal fibre in which there exists un-removable durability finishing agent or reactive dyes, so that it

cannot be completely dissolved.

2 Normative references

The articles contained in the following documents have become this part of GB/T

2910 when they are quoted herein. For the dated documents so quoted, all the

modifications (excluding corrections) or revisions made thereafter shall not be applicable to this part. For the undated documents so quoted, the latest editions shall be applicable to this part.

GB/T 2910.1 Textiles - Quantitative chemical analysis - Part 1. General principles of testing (GB/T 2910.1-2009, ISO 1833-1. 2006, IDT)

3 Principle

The viscose, cupro or modal fibre is dissolved from a known dry mass of the mixture, with sodium zincate solution. The residue is collected, washed, dried and weighed; its corrected mass is expressed as a percentage of the dry mass of the mixture. The percentage of viscose, cupro or modal fibre is found by the difference.

vigorously on the mechanical shaker for (20 ± 1) min. Filter the contents of the flask through the weighed filter crucible. Apply suction to the crucible to remove excess liquor, again replace the residue in the flask by means of forceps, add 100 mL of ammonia solution, and shake the flask for 5 min on the mechanical shaker. Filter the contents of the flask through the same weighed filter crucible and wash any fibres from the flask into the crucible with water. Wash the crucible and residue with 100 mL of acetic acid solution, and then thoroughly with water. Do not apply suction until each washing liquor has drained under gravity. Finally, drain the crucible using suction, dry the crucible and residue, then cool and weigh them.

7 Calculation and expression of results

Calculate the results as described in the general instructions of GB/T 2910.1. The value of d for raw, scoured, kiered, or bleached cotton is 1,02.

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