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

GB/T 2910.13-2009

**Textiles -- Quantitative chemical analysis -- Part 14: Mixtures of
certain chlorofibre and certain other fibers (method using
carbon disulfide/acetone)
(English Translation)**

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1 Scope

This Part of GB/T 2910 specifies the method for the determination of chlorine- containing fiber content, in a binary mixture consisting of the following fibers, after removal of non-fibrous matter by the carbon disulfide/acetone method:

- Certain chlorinated fibers, whether or not post-chlorinated;

AND

- Wool, animal hair, silk, cotton, viscose, cupro, modal, polyamide, polyester, acrylic fiber, glass fiber.

When the content of wool or silk in the mixture exceeds 25%, it should use the method of GB/T 2910.4.

When the content of nylon in the mixture exceeds 25%, it should use the method of GB/T 2910.7.

2 Normative references

The provisions in following documents become the provisions of this Part through reference in this Part of GB/T 2910. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Part; however, parties who reach an agreement based on this Part are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

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 Principles

Use carbon disulfide/acetone azeotrope reagent, to dissolve and remove chlorine-containing fiber from a mixture of known dry mass. Collect the residue. Wash, dry, weigh it. Use the corrected mass to calculate its percentage of the dry mass in the mixture. Obtain the mass percentage of the chlorine-containing fibers, through the difference.

4 Reagents

Use the reagents, which are specified in GB/T 2910.1 and 4.1 and 4.2 of this Part.

4.1

Azeotropic mixture of carbon disulfide/acetone.

Mix 555 mL of carbon disulfide and 445 mL of acetone.

Safety warning: The reagent is poisonous, so perfect protective measures shall be taken when using it.

4.2

Ethanol.

5 Equipment

Use the equipment, which is specified in GB/T 2910.1 and 5.1, 5.2, 5.3 of this Part.

5.1

Conical flask with a stopper, which has a capacity of not less than 200 mL.

5.2

Mechanical oscillator.

5.3

Watch glass.

6 Test steps

Follow the general procedures, which are specified in GB/T 2910.1. Then follow the steps below:

Put the specimen into a stoppered conical flask. Add 100 mL of carbon disulfide/acetone mixed solution (4.1) per gram of specimen. Close the cork tightly.

Oscillate it on a mechanical oscillator for 20 minutes. At the beginning of the oscillation, it may loosen the cork once or twice, to release excessive pressure.

Filter the solution through a glass fritted crucible of known dry mass.

Then use 100 mL solution (4.1), to repeat the above operation.

Repeat the above operation several times, until no trace of chlorine-containing fibers remains, after a drop of the solution is evaporated on a watch glass.

Use some more solution (4.1), to wash the residue from the conical flask with a stopper,

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