
International Standard



706

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Rubber latex — Determination of coagulum content (sieve residue)

Latex de caoutchouc — Détermination de la teneur en coagulum (refus sur tamis)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 706 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

This third edition of ISO 706 cancels and replaces the second edition (ISO 706-1976) of which it constitutes a technical revision (see the Introduction).

Rubber latex — Determination of coagulum content (sieve residue)

0 Introduction

This third edition of ISO 706 expands the scope to include synthetic rubber latices.

1 Scope and field of application

This International Standard specifies a method for the determination of the coagulum content (sieve residue) of natural rubber latex concentrate containing preservative agents and also for the determination of the coagulum content (sieve residue) of synthetic rubber latices.

2 References

ISO 123, *Rubber latex — Sampling*.¹⁾

ISO 3310/1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*.

3 Definition

For the purpose of this International Standard, the following definitions applies.

coagulum; sieve residue: The material, comprising pieces of coagulated rubber, latex skin and coarse foreign matter, retained under the conditions of the test on a stainless steel wire cloth with an average aperture width of $180 \pm 10 \mu\text{m}$.

4 Reagents

During the analysis, use only reagents of recognized analytical grade and only distilled water or water of equivalent purity.

4.1 Potassium oleate or ammonium laurate, surfactant solution, 5 % (m/m), of pH 10 (for use with natural rubber latices).

4.2 Water-soluble ethoxylated alkyl phenol, surfactant solution 5 % (m/m) (for use with synthetic rubber latices).

4.3 Litmus paper.

5 Apparatus²⁾

Ordinary laboratory apparatus, and

5.1 Test filter, consisting of a disk of stainless steel wire cloth with an average aperture width of $180 \pm 10 \mu\text{m}$.

5.2 Two stainless steel rings, of equal internal diameter between 25 and 50 mm.

5.3 Oven, capable of being controlled at $100 \pm 5^\circ\text{C}$.

5.4 Desiccator.

5.5 Beaker, of capacity 600 cm^3 which has a lip.

6 Sampling

Sampling shall be carried out in accordance with one of the methods specified in ISO 123 for taking the laboratory sample.

7 Procedure

Weigh $200 \pm 1 \text{ g}$ of the laboratory sample (clause 6) into the beaker (5.5). Add 200 cm^3 of the appropriate surfactant solution (4.1 or 4.2) and mix thoroughly. Dry the test filter (5.1) to constant mass in the oven (5.3), controlled at $100 \pm 5^\circ\text{C}$, and weigh to the nearest milligram. Record the mass (m_1). Firmly clamp the test filter between the stainless steel rings (5.2).

NOTE — If the wire cloth is not clean, immerse it for 2 min in boiling nitric acid ($\rho 1,42 \text{ g/cm}^3$) and wash it with water before drying it to constant mass and weighing.

1) At present at the stage of draft. (Revision of ISO 123-1974.)

2) The term millilitre (ml) is accepted as a commonly used special name for the cubic centimetre (cm^3), in accordance with a decision of the 12th Conférence Générale des Poids et Mesures. Apparatus with either type of marking is satisfactory for use with this International Standard.