
**Synthetic rubber latex — Preparation
of dry polymer**

Latex de caoutchouc synthétique — Préparation du polymère sec





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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. Each 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

This fifth edition cancels and replaces the fourth edition (ISO 2028:1999), which has been technically revised with the following modifications.

- [Clause 2](#) "Normative references" has been updated.
- In [4.1](#), the note giving information on which company may provide polyamine polyelectrolytes, has been deleted.

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WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies four methods for the isolation of dry polymer from synthetic polymer latices containing anionic surfactants, for the purpose of subsequent testing. Tests to be performed include the determination of the Mooney viscosity, the bound-styrene or acrylonitrile content in the polymer chain or the mill shrinkage.

Because of the wide variety of surfactants and stabilizers used in the manufacture of synthetic rubber latices, there is not one method suitable for all latices. The methods given in this International Standard are suitable for a wide variety of latices, but their applicability is to be confirmed for individual types. Latices containing non-ionic stabilizers, in particular, may be resistant to coagulation.

These methods are not necessarily suitable, without modification, for latices containing polymers having high tack.

The dry polymer as isolated may contain residual organic acids or their aluminium salts which may affect the properties of the polymer and which are to be taken into account when performing analytical tests.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 123, *Rubber latex — Sampling*

ISO 124, *Latex, rubber — Determination of total solids content*

3 Principle

The latex is coagulated in the presence of an antioxidant, using different procedures depending on the type of latex. The resultant crumb is washed with water and dried in a ventilated oven at 70 °C to constant mass.

NOTE Freezing is also a suitable method for the isolation of some latices; sufficient details of the method are not available for inclusion in this edition of ISO 2028.

4 Reagents

During the preparation of the reagent solutions and the isolation of the polymer, use only distilled water or water of equivalent purity.