BS ISO 19043:2015



BSI Standards Publication

Natural rubber latex concentrate — Determination of total phosphate content by spectrophotometric method



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This British Standard is the UK implementation of ISO 19043:2015.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Concentré de latex de caoutchouc naturel — Détermination de la teneur totale en phosphate par méthode spectrophotométrique



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Foreword

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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*.

Natural rubber latex concentrate — Determination of total phosphate content by spectrophotometric method

1 Scope

This International Standard specifies a method for the determination of total phosphate content of natural rubber latex concentrate. This method is not necessarily suitable for latex from natural sources other than the *Hevea brasiliensis*.

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 124, Latex, rubber — Determination of total solids content

ISO 648, Laboratory glassware — Single-volume pipettes

3 Principle

Approximately 20 g of concentrated latex, of which the total solids content has been determined, is coagulated with hydrochloric acid.

The coagulated latex is removed and the serum filtered through filter paper.

The residual phosphate present in a known volume of the serum is determined by measuring absorbance with a spectrophotometer at wavelength 470 nm.

4 Apparatus

4.1 Balance, accurate to 0,1 mg.

4.2 Volumetric pipettes, of capacity 10 cm³ and 25 cm³, complying with the requirements of ISO 648, class A.

5 Reagents

Use reagents of recognized analytical grade and deionized water or water of equivalent purity.

5.1 Hydrochloric acid 37 %.

5.2 Hydrochloric acid 1:24.

Mix 40 ml of 37 % hydrochloric acid (5.1) with deionized water and make up to 1 000 ml.

5.3 Vanadate molybdate.

a) Dissolve 25 g ammonium molybdate in 300 ml deionized water.