

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 2005

NATURAL RUBBER LATICES

DETERMINATION OF SLUDGE CONTENT

1st EDITION

May 1971

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 2005, *Natural rubber latices – Determination of sludge content*, was drawn up by Technical Committee ISO/TC 45, *Rubber*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question led to the adoption of Draft ISO Recommendation No. 2005, which was circulated to all the ISO Member Bodies for enquiry in May 1970. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	India	Sweden
Austria	Israel	Switzerland
Ceylon	Italy	Turkey
France	Malaysia	U.A.R.
Germany	New Zealand	United Kingdom
Greece	South Africa, Rep. of	U.S.A.
Hungary	Spain	U.S.S.R.

No Member Body opposed the approval of the Draft.

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

NATURAL RUBBER LATICES

DETERMINATION OF SLUDGE CONTENT

1. SCOPE

This ISO Recommendation describes a method for the determination of the sludge content of natural rubber latex which contains preservative agents and which has been submitted to some type of concentration process. The method is not necessarily suitable for latices from natural sources other than *Hevea brasiliensis*. It is not suitable for compounded latex or vulcanized latex.

2. PRINCIPLE OF METHOD

The latex is centrifuged and the resultant sludge is repeatedly washed with ammonia-alcohol solution. The sludge is then dried to constant mass.

3. REAGENT

Ammonia-alcohol solution of the following composition :

— Ammonium hydroxide, $\rho = 0.90 \pm 0.02 \text{ g/cm}^3$	10 cm ³
— Ethanol, 95 % (V/V) minimum purity	340 cm ³
— Water	1000 cm ³

The ammonium hydroxide should be of recognized analytical reagent quality and the water used should be distilled or of equivalent purity.

4. APPARATUS

Centrifuge producing a mean acceleration of approximately $12\,000 \text{ m/s}^2$ with two 50 cm³ conical centrifuge tubes.