

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 35

DETERMINATION OF THE MECHANICAL STABILITY OF LATEX

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 35, *Determination of the Mechanical Stability of Latex*, was drawn up by the Technical Committee ISO /TC 45, *Rubber*, the Secretariat of which is held by the British Standards Institution (B.S.I.).

The draft proposal put forward by the Secretariat was considered and amended at the meetings held in London (1948), the Hague (1949), Akron (1950), Oxford (1951) and Paris (1953).

On 28 August 1954, the Draft ISO Recommendation proposed by the Technical Committee ISO /TC 45 was submitted to all ISO Member Bodies and approved, subject to certain editorial amendments, by the following 25 (out of a total of 34) Member Bodies:

Austria	Netherlands
Belgium	*New Zealand
*Canada	Pakistan
Denmark	Portugal
Finland	Spain
France	Sweden
Hungary	Switzerland
India	Union of South Africa
Ireland	United Kingdom
Israel	U.S.A.
Italy	*U.S.S.R.
Japan	Yugoslavia
*Mexico	

No Member Body opposed the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council which decided, in March 1957, to accept it as an ISO RECOMMENDATION.

* These Member Bodies stated that they had no objection to the Draft being approved.

DETERMINATION OF THE MECHANICAL STABILITY OF LATEX

FOREWORD

This method of test is for natural rubber latex which contains preservative agents, and which has been submitted to some type of concentration process. The test is not necessarily suitable for latices from natural sources other than *Hevea brasiliensis* or for latices of synthetic rubber, compounded latex, vulcanized latex or artificial dispersions of rubber.

1. SUMMARY

Latex is stirred at a high speed and the time required to produce obvious signs of clotting is regarded as a measure of mechanical stability.

2. APPARATUS

A latex container consisting of a flat-bottomed cylindrical vessel either 127 mm or 5 inches high and having an inside diameter of either 56 mm to 60 mm or 2.20 inches to 2.35 inches. The inner surface must be smooth and a transparent container is preferred.

The stirring apparatus consists of a vertical stainless steel shaft either 15.2 cm or 6 inches long and tapering to either 6.35 mm or 0.25 inch at its lower end, where is attached a horizontal smooth stainless steel disc either 21 mm $\pm$ 0.025 mm or 0.820 inch $\pm$ 0.001 inch in diameter and either 1.55 mm $\pm$ 0.05 mm or 0.062 inch $\pm$ 0.002 inch thick by means of a threaded stud at the exact centre of the disc. The apparatus is designed to maintain a stirring speed of 14 000 r.p.m. $\pm$ 200 r.p.m. throughout a test. The speed should be checked while a test is in progress. At this speed the shaft must not run more than either 0.25 mm or 0.01 inch out of true.

An arrangement for holding the latex container so that the axis of the rotating shaft is concentric with that of the latex container and the bottom of the stirring disc is either 12.5 mm $\pm$ 2.5 mm or 0.5 inch $\pm$ 0.1 inch from the bottom inside of the latex container.