

ICS 83.060
CCS B 72



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14797.3-2008

Replacing GB/T 14797.3-1993

**Natural rubber latex concentrate -- Prevulcanized rubber latex --
Determination of swelling capacity**

浓缩天然胶乳 硫化胶乳 溶胀度的测定

(English Translation)

Issued on: June 19, 2008

Implemented on: December 1, 2008

Issued by: Standardization Administration of China

Table of Contents

Foreword
1 Scope
2 Normative references
4 Reagents
5 Apparatus and materials

Foreword

This section GB/T Part of 314,797.

This Part replaces GB/T 14797.3-1993 "vulcanized latex Natural rubber latex concentrate - Determination of the degree of swelling." this section compared with the GB/T 14797.3-1993, the main differences are as follows.

--- 5.6 "blade" on renamed "Squeegee" on;

--- Added "1 Squeegee device";

--- Increased Chapter 9. Test report.

This section proposed by the People's Republic of China Ministry of Agriculture.

This part of the National Rubber and rubber products natural rubber Standardization Technical Committee Technical Committee (SAC/TC35/SC8) Centralized.

This section is responsible for drafting units. China Tropical Agricultural Sciences Institute of Agro.

1 Scope

GB/T 14797 provisions of this part of the determination of the degree of swelling of the vulcanized latex.

This section applies to *Hevea brasiliensis* produced, vulcanized latex concentrate after high-ammonia latex prepared saved.

This section does not apply with synthetic latex, and other specialty latex.

2 Normative references

The following documents contain provisions which, through reference GB/T 14797 in this section, constitute provisions of this part. For dated reference documents Member, all

subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 8290 Natural rubber latex concentrate sampling (GB/T 8290-1987, neq ISO 123. 1985) Principle 3 Circular film specimen in toluene than the diameter difference between the original diameter before and after the swelling is calculated as a percentage of the degree of swelling of the film. Film Vulcanization deeper level, the smaller the degree of swelling. Inferred vulcanized latex vulcanization degree of depth according to the degree of swelling.

4 Reagents

4.1

Toluene. chemically pure.

4.2

CMC (carboxymethylcellulose salt). chemically pure. It made 0.15% (mass fraction) CMC aqueous spare.

4.3

Zinc oxide. chemically pure. Made pastes use. Weigh zinc oxide 20g, placed in a mortar, add 0.15% (mass fraction) CMC (4.2) aqueous solution 26mL, Research uniform, now with the current.

5 Apparatus and materials

5.1

qualitative filter paper. Size 600mm x 600mm, 120mm x 600mm cut paper use.

5.2

Belt punch knife. to punch the hole 25mm.

5.3

dish. 90mm.

5.4

standard coordinate paper. Size 10mm x 10mm.

5.5

Oven. Electric Blast, can control the temperature of $40\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$.

5.6

Squeegee device. with four 3mm thick plexiglass plate made of a rectangular frame size is 100mm x 25mm x 40mm of (Figure 1), with chloroform cement. After opening a box of milling, in a pair of long sides milled long 80mm deep 0.125mm gap;

After the opening of another block of milling, in a pair of long sides milled long 90mm deep 0.3mm gap (two in each side of the gap should A large box on the side).

5.7

Preparation of special paper. the 120mm x 600mm strip (5.1) on the glass tile, scraping gum device (5.6) on one end of the strip (120mm edge), after the squeegee side is located below the notch 0.3mm deep, into the box zinc oxide pastes (4.3), slow until evenly distributed Slow moving forward, the paper thus leaving a layer of 0.3mm thick zinc oxide pastes, placed in the oven at 80 deg.] C (5.5) after drying 30min Flatten, cut 120mm x 80mm piece of paper backup.