INTERNATIONAL STANDARD 2027

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Rubber, natural latex, evaporated, preserved — Specification

Latex de caoutchouc naturel évaporé, préservé — Spécifications

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2027 was developed by Technical Committee ISO/TC 45, *Rubber and rubber products*, and circulated to the member bodies in August 1976.

It has been approved by the member bodies of the following countries :

Austria	Ireland	Sweden
Belgium	Mexico	Turkey
Brazil	Netherlands	United Kingdom
Bulgaria	New Zealand	U.S.A.
Canada	Poland	U.S.S.R.
Germany	Romania	
Hungary	Spain	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

France
Italy

This second edition cancels and replaces the first edition (i.e. ISO 2027-1974).

Printed in Switzerland

Rubber, natural latex, evaporated, preserved — Specification

1 SCOPE AND FIELD OF APPLICATION

This International Standard gives specifications for natural rubber latex which has been concentrated by evaporation. It does not apply to natural rubber latices which have been concentrated by centrifuging or creaming, or to latices from natural sources other than *Hevea brasiliensis*, or to compounded latex or vulcanized latex.

This International Standard covers requirements for evaporated natural rubber latices of the following types :

NR latex, type HA evaporated : Evaporated latex preserved with ammonia only or with ammonia together with other preservative(s), with an alkalinity of at least 0,60 % (*m/m*) on the latex.

NR latex, type KHS evaporated : Evaporated latex preserved with potassium hydroxide and having a nominal total solids content of 73 %.

NR latex, type KLS evaporated : Evaporated latex preserved with potassium hydroxide and having a nominal total solids content of 68 %.

2 REFERENCES

ISO 35, *Natural rubber latex — Determination of mechanical stability.*

ISO 123, *Rubber latex — Sampling.*

ISO 124, *Rubber latices — Determination of total solids content.*

ISO 125, *Natural rubber latex — Determination of alkalinity.*

ISO 126, *Natural rubber latex — Determination of dry rubber content.*

ISO 506, *Natural rubber latex — Determination of volatile fatty acid number.*

ISO 706, *Rubber latices — Determination of coagulum content.*

ISO 1654, *Raw rubber and rubber latex — Determination of copper.*[1)]

ISO 1655, *Raw rubber and rubber latex — Determination of manganese content — Potassium periodate photometric method.*

ISO 2005, *Natural rubber latex — Determination of sludge content.*

3 REQUIREMENTS

The latex shall conform to the requirements given in the table.

In the case of NR latex, type HA evaporated, the chemical nature and approximate quantity of any preservative(s) other than ammonia or formaldehyde shall be stated. NR latex, type HA evaporated, shall not contain fixed alkali added at any stage in its production.

1) At present at the stage of draft. (Revision of ISO/R 1654-1971.)

4 SAMPLING

The latex shall be sampled by one of the methods specified in ISO 123.

TABLE – **Requirements**

Characteristic	Limits			Document specifying method of test
	type HA evaporated	type KHS evaporated	type KLS evaporated	
Total solids content, % (*m/m*), min.	61,5	72,0	67,0	ISO 124
Non-rubber solids[1], % (*m/m*), max.	5,5	8,0	7,5	–
Alkalinity (as NH_3), % (*m/m*) on latex, min.	0,60	–	–	ISO 125
Alkalinity (as KOH), % (*m/m*) on latex, min.	–	0,75	0,80	ISO 125
Mechanical stability, seconds, min.	540	–	–	ISO 35
Coagulum content, % (*m/m*), max.	0,05	0,05	0,05	ISO 706
Copper content, mg/kg of total solids, max.	8	8	8	ISO 1654
Manganese content, mg/kg of total solids, max.	8	8	8	ISO 1655
Sludge content, % (*m/m*), max.	0,40	0,40	0,40	ISO 2005
Volatile fatty acid number (VFA)	As agreed by the interested parties but not to exceed 0,20			ISO 506
Colour on visual inspection	No pronounced blue or grey		for all three types	–
Odour after neutralization of ammonia with boric acid	No pronounced odour of putrefaction			–

1) Difference between total solids content and dry rubber content. Dry rubber content shall be determined according to ISO 126.