INTERNATIONAL STANDARD

ISO 2027

Third edition
1990-02-01

Natural rubber latex concentrate, evaporated, preserved — Specification

Latex concentré de caoutchouc naturel évaporé, préservé — Spécifications

Reference number
ISO 2027:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 2027 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

This third edition cancels and replaces the second edition (ISO 2027:1978), of which it constitutes a minor revision.

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Case Postale 56 • CH-1211 Genève 20 • Switzerland
Printed in Switzerland

Natural rubber latex concentrate, evaporated, preserved — Specification

1 Scope

This International Standard gives specifications for natural rubber latex concentrate which has been concentrated by evaporation. It does not apply to natural rubber latex concentrates 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 latex concentrates of the following types:

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

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

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

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 35:1989, *Natural rubber latex concentrate — Determination of mechanical stability.*

ISO 123:1985, *Rubber latex — Sampling.*

ISO 124:1985, *Rubber latices — Determination of total solids content.*

ISO 125:1990, *Natural rubber latex concentrate — Determination of alkalinity.*

ISO 126:1989, *Natural rubber latex concentrate — Determination of dry rubber content.*

ISO 506:1985, *Natural rubber latex concentrate — Determination of volatile fatty acid number.*

ISO 706:1985, *Rubber latex — Determination of coagulum content (sieve residue).*

ISO 2005:1985, *Natural rubber latex concentrate — Determination of sludge content.*

ISO 7780:1987, *Rubbers and rubber latices — Determination of manganese content — Sodium periodate photometric methods.*

ISO 8053:1986, *Rubber and latex — Determination of copper content — Photometric method.*

3 Requirements

The latex concentrate shall conform to the requirements given in table 1.

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

4 Sampling

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

Table 1 — 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*) with respect to the latex, min.	0,60	—	—	ISO 125
Alkalinity (as KOH), % (*m*/*m*) with respect to the 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 8053
Manganese content, mg/kg of total solids, max.	8	8	8	ISO 7780
Sludge content, % (*m*/*m*), max.	0,40	0,40	0,40	ISO 2005
Volatile fatty acid (VFA) number	As agreed by the interested parties but not to exceed 0,20			ISO 506
Colour on visual inspection	No pronounced blue or grey			—
Odour after neutralization of ammonia with boric acid	No pronounced odour of putrefaction			—

1) The difference between total solids content and dry rubber content. Dry rubber content shall be determined in accordance with ISO 126.

UDC 678.031.5

Descriptors: rubber, natural rubber, latex, specifications.

Price based on 2 pages