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Natural rubber latex concentrate — Centrifuged or creamed, ammonia-preserved types — Specifications

Latex concentré de caoutchouc naturel — Types centrifugés ou crémés, préservés à l'ammoniaque — Spécifications

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

This sixth edition cancels and replaces the fifth edition (ISO 2004:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the dry rubber content in Table 1 has been corrected from 60 % to 60,0 %, for type HA, LA and XA natural rubber latex concentrate;

— the coagulum content in Table 1 has been reduced from 0,03 % to 0,02 %;

— the sludge content in Table 1 has been reduced from 0,10 % to 0,06 %.

Natural rubber latex concentrate — Centrifuged or creamed, ammonia-preserved types — Specifications

1 Scope

This document gives specifications for natural rubber latex concentrate types which are preserved wholly or in part with ammonia and which have been produced by centrifuging or creaming.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO 123, *Rubber latex — Sampling*

ISO 124, *Latex, rubber — Determination of total solids content*

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

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

ISO 127, *Rubber, natural latex concentrate — Determination of KOH number*

ISO 506, *Rubber latex, natural, concentrate — Determination of volatile fatty acid number*

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

ISO 2005, *Rubber latex, natural, concentrate — Determination of sludge content*

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

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
natural rubber latex concentrate
natural rubber latex containing ammonia and/or other preservatives, which has been subjected to some process of concentration

3.2
type HA natural rubber latex concentrate
centrifuged latex preserved after concentration with ammonia only, with an alkalinity of at least 0,60 % (by mass) calculated with respect to the latex

3.3
type LA natural rubber latex concentrate
centrifuged latex preserved after concentration with ammonia together with other preservatives, with an alkalinity of not more than 0,29 % (by mass) calculated with respect to the latex

3.4
type XA natural rubber latex concentrate
centrifuged latex preserved after concentration with ammonia together with other preservatives, with an alkalinity between 0,30 % and 0,59 % (by mass) calculated with respect to the latex

3.5
creamed type HA natural rubber latex concentrate
creamed latex preserved after concentration with ammonia only, with an alkalinity of at least 0,55 % (by mass) calculated with respect to the latex

3.6
creamed type LA natural rubber latex concentrate
creamed latex preserved after concentration with ammonia together with one or more additional preservatives, with an alkalinity of not more than 0,35 % (by mass) calculated with respect to the latex

4 Requirements

The latex concentrate shall conform to all the requirements in Table 1.

If one or more preservatives other than ammonia are added to the latex concentrate, the chemical nature and approximate quantity of such preservative(s) shall be stated. The latex concentrate shall not contain fixed alkali added at any stage in its production.

Table 1 — Requirements

Characteristic	Type HA	Type LA	Type XA[c]	Type HA creamed	Type LA creamed	Method of test
Total solids content, min., % (by mass)	61,0 or as agreed between the two parties			65,0	65,0	ISO 124
Dry rubber content, min., % (by mass)	60,0	60,0	60,0	64,0	64,0	ISO 126
Non-rubber solids, max.[a], % (by mass)	1,7	1,7	1,7	1,7	1,7	—
Alkalinity (as NH_3), calculated with respect to the latex concentrate, % (by mass)	0,60 min.	0,29 max.	0,30 to 0,59	0,55 min.	0,35 max.	ISO 125
Mechanical stability, min.[b], seconds	650	650	650	650	650	ISO 35
Coagulum content, max., % (by mass)	0,02	0,02	0,02	0,02	0,02	ISO 706
Copper content, max., mg/kg of total solids	8	8	8	8	8	ISO 8053
Manganese content, max., mg/kg of total solids	8	8	8	8	8	ISO 7780
Sludge content, max., % (by mass)	0,06	0,06	0,06	0,06	0,06	ISO 2005
Volatile fatty acid (VFA) number, max.	0,06 or as agreed between the two parties					ISO 506
KOH number, max.	0,70 or as agreed between the two parties					ISO 127

[a] The difference between the total solids content and the dry rubber content.

[b] The mechanical stability time normally stabilizes between 21 and 35 days when the latex is fully matured.

[c] XA is equivalent to medium ammonia (MA) latex.

5 Sampling

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

ICS 83.040.10

Price based on 3 pages