BS ISO 2004:2010

BSI Standards Publication

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

National foreword

This British Standard is the UK implementation of ISO 2004:2010. It supersedes BS 6057-1.1:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/50, Rubber - Raw, natural and synthetic, including latex and carbon black.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

ISBN 978 0 580 62641 8

ICS 83.040.10

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2010.

Amendments issued since publication

Date	Text affected

INTERNATIONAL STANDARD

ISO 2004

Fifth edition
2010-09-01

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

Reference number
ISO 2004:2010(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 2004 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 fifth edition cancels and replaces the fourth edition (ISO 2004:1997), which has been technically revised.

INTERNATIONAL STANDARD ISO 2004:2010(E)

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

1 Scope

This International Standard 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 referenced documents are indispensable for the application 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.

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.

5 Sampling

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

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	60	60	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)	0,03	0,03	0,03	0,03	0,03	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)	0,10	0,10	0,10	0,10	0,10	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 within 21 days.

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

ICS 83.040.10

Price based on 3 pages

This page deliberately left blank

British Standards Institution (BSI)

BSI is the independent national body responsible for preparing British Standards and other standards-related publications, information and services.
It presents the UK view on standards in Europe and at the international level.

It is incorporated by Royal Charter.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover.

Tel: +44 (0)20 8996 9001 Fax: +44 (0)20 8996 7001

BSI offers Members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Tel: +44 (0)20 8996 7669 Fax: +44 (0)20 8996 7001
Email: plus@bsigroup.com

Buying standards

You may buy PDF and hard copy versions of standards directly using a credit card from the BSI Shop on the website **www.bsigroup.com/shop.** In addition all orders for BSI, international and foreign standards publications can be addressed to BSI Customer Services.

Tel: +44 (0)20 8996 9001 Fax: +44 (0)20 8996 7001
Email: orders@bsigroup.com

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Knowledge Centre.

Tel: +44 (0)20 8996 7004 Fax: +44 (0)20 8996 7005
Email: knowledgecentre@bsigroup.com

Various BSI electronic information services are also available which give details on all its products and services.

Tel: +44 (0)20 8996 7111 Fax: +44 (0)20 8996 7048
Email: info@bsigroup.com

BSI Subscribing Members are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration.

Tel: +44 (0)20 8996 7002 Fax: +44 (0)20 8996 7001
Email: membership@bsigroup.com

Information regarding online access to British Standards via British Standards Online can be found at **www.bsigroup.com/BSOL**

Further information about BSI is available on the BSI website at **www.bsigroup.com/standards**

Copyright

Tel: +44 (0)20 8996 7070
Email: copyright@bsigroup.com

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

Tel +44 (0)20 8996 9001
Fax +44 (0)20 8996 7001
www.bsigroup.com/standards

raising standards worldwide™