Singapore Standards Council

SS EN 420:2003+A1:2016

((ICS 13.340.40)

SINGAPORE STANDARD

Protective gloves – General requirements and test methods

(This national standard is the identical implementation of EN 1990 : 2002 and is adopted with permission of CEN, Avenue Marnix 17, 1000 Brussels)

Incorporating Amendment No. 1

[Confirmed 2016]

Published by

Enterprise Singapore

SS EN 420:2003+A1:2016
(ICS 13.340.40)

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Protective gloves – General requirements and test methods

ISBN 9971-67-997-3

This Singapore Standard was approved by the General Engineering and Safety Standards Committee on behalf of the Standards Council of Singapore on 3 September 2004.

First published, 2005

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Association for Singapore Marine Industries
Jubilant International Pte Ltd
Land Transport Authority
Ministry of Manpower
PDS International Pte Ltd
PSB Corporation Pte Ltd
QSS Safety Products (S) Pte Ltd
SETSCO Services Pte Ltd
Singapore Contractors Association Limited
Singapore Manufacturers' Federation

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National Foreword

This Singapore Standard was prepared by the Technical Committee on Personal Safety and Ergonomics under the direction of the General Engineering and Safety Standards Committee. It supersedes SS 261 : 1997 – "Specification for industrial safety gloves and mittens".

This national standard is the implementation of EN 420 : 2003 – "Protective gloves – General requirements and test methods" with minor adaptations and is adopted with permission of CEN, Rue de Stassart 36, B-1050 Brussels.

As amended Dec 16

The objective of the standard is to provide users and manufacturers with a set of general requirements and test methods for protective gloves. Annex ZA of EN 420 is not applicable in the Singapore context. Annex D is included to provide guidance on the selection of glove materials.

This standard does not purport to address all of the safety and health problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

In preparing this standard, the previous SS 261 : 1997 was used as a basis. Reference was also made to the following publications:

1.	AS/NZS 2161.1 : 2000	Occupational protective gloves Part 1 : Selection, use and maintenance
2.	AS/NZS 2161.2 : 1998	Occupational protective gloves Part 2 : General requirements
3.	ISO 4045 : 1977	Leather – Determination of pH

Acknowledgement is made for the use of information from the above publications.

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

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*

2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*

3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Foreword

This document EN 420:2003 has been prepared by Technical Committee CEN/TC 162 “Protective clothing including hand and arm protection and lifejackets”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

This document supersedes EN 420:1994.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Annexes A and D are informative and annexes B and C are normative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Specification for protective gloves – General requirements and test methods

1 Scope

This standard defines the general requirements and relevant test procedures for glove design and construction, resistance of glove materials to water penetration, innocuousness, comfort and efficiency, marking and information supplied by the manufacturer applicable to all protective gloves.

NOTE – It can also be applicable to arm protectors and gloves permanently incorporated in containment enclosures.

The specification does not apply to gloves used by the medical profession, used for protection against electrical hazards or for handling of products where cleanliness is of importance (e.g. food, PCB).

A non exhaustive list of these standards is given in the Bibliography.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 344-1 : 1992, *Safety, protective and occupational footwear for professional use – Part 1: Requirements and test methods*

EN 374-1 : 2003, *Protective gloves against chemicals and micro-organisms – Part 1: Terminology and performance requirements*

EN 407, *Protective gloves against thermal risks (heat and/or fire)*

EN 455-3, *Medical gloves for single use – Part 3: Requirements and testing for biological evaluation*

EN 1149-1, *Protective clothing – Electrostatic properties – Part 1: Surface resistivity (Test methods and requirements)*

EN 1149-2, *Protective clothing – Electrostatic properties – Part 2: Test method for measurement of the electrical resistance through a material (vertical resistance)*

EN 1149-3, *Protective clothing – Electrostatic properties – Part 3: Test methods for measurement of charge decay*

EN 1413, *Textile – Determination of pH of aqueous extract*

EN 20811, *Textiles – Determination of resistance to water penetration – Hydrostatic pressure test*

EN 23758, *Textiles – Care labelling code using symbols (ISO 3758 : 1991)*

EN ISO 2419, *Leather – Physical and mechanical tests – Sample preparation and conditioning (ISO 2419 : 2002)*

EN ISO 4045, *Leather – Determination of pH (ISO 4045 : 1977)*

EN ISO 4048, *Leather – Determination of matter soluble in dichloromethane (ISO 4048 : 1977)*

EN ISO 17075 : 2007, *Leather – Chemical tests – Determination of chromium (VI) content (ISO 17075:2007)* *As amended Dec 16*