



# MALAYSIAN STANDARD

MS ISO 13688:2020

## Protective clothing – General Requirements (ISO 13688:2013, IDT) (First revision)

ICS: 13.340.10

Descriptors: garments, protective clothing, work clothing, specifications, ergonomics, ageing (material), size designation, marking

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## Committee representation

The National Standards Committee on Occupational Safety and Health (NSC W) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Business Council for Sustainability & Responsibility Malaysia  
Chemical Industries Council of Malaysia  
Construction Industry Development Board Malaysia  
Department of Agriculture Malaysia  
Department of Chemistry, Malaysia  
Department of Environment  
Department of Occupational Safety and Health Malaysia  
Department of Standards Malaysia (Secretariat)  
Energy Commission  
Federation of Malaysian Manufacturers  
Fire and Rescue Department Malaysia  
Lloyd's Register Technical Services Sdn Bhd  
Malaysian Employers Federation  
Malaysian Industrial Hygiene Association  
Malaysian International Chamber of Commerce and Industry  
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Malaysian Society for Occupational Safety and Health  
Malaysian Trades Union Congress  
Minerals and Geoscience Department Malaysia  
Ministry of Health Malaysia  
Ministry of International Trade and Industry  
National Institute of Occupational Safety and Health  
SIRIM QAS International Sdn Bhd  
SME Corporation Malaysia  
The Institution of Engineers, Malaysia  
Universiti Kebangsaan Malaysia  
Universiti Teknologi MARA

The Technical Committee on Personal Safety – Protective Clothing and Equipment for Occupational Use recommended the adoption of the ISO Standard as Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia  
Department of Chemistry Malaysia  
Department of Occupational Safety and Health Malaysia  
Department of Standards Malaysia (Secretariat)  
3M Malaysia Sdn Bhd  
Federation of Malaysian Consumers Association  
Fire and Rescue Department Malaysia  
Malaysian Nuclear Agency  
National Institute of Occupational Safety and Health  
PETRONAS Carigali Sdn Bhd  
Pro-Guard Technologies (M) Sdn Bhd  
Projek Lebuhraya Usahasama Berhad  
Science and Technology Research Institute for Defence  
SIRIM QAS International Sdn Bhd (Testing Services Department)

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## National foreword

This Malaysian Standard was developed by the Technical Committee on Personal Safety – Protective Clothing and Equipment for Occupational Use under the authority of the Occupational Health and Safety National Standards Committee.

This Malaysian Standard is identical with ISO 13688:2013, *Protective clothing – General requirements*, published by the International Organization for Standardization (ISO). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, “this International Standard” should read “this Malaysian Standard”;
- b) the comma which is used as a decimal sign (if any), to read as a point; and
- c) references to International Standard should be replaced by equivalent Malaysian Standard as follows:

<u>Referenced International Standard</u>	<u>Corresponding Malaysian Standard</u>
ISO 105 (all parts), <i>Textiles – Test for colour fastness</i>	MS ISO 105 (all parts), <i>Textiles – Test for colour fastness</i>
ISO 5077, <i>Textile – Determination of dimensional change in washing and drying</i>	MS ISO 5077, <i>Textile – Determination of dimensional change in washing and drying</i>
ISO 6330, <i>Textiles – Domestic washing and drying procedures for textile testing</i>	MS ISO 6330, <i>Textiles – Domestic washing and drying procedures for textile testing</i>

This Malaysian Standard cancels and replaces MS ISO 13688:2004, *Protective clothing - General requirements*.

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, wording and presentation of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21.

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## 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 13688 was prepared by Technical Committee ISO/TC 94, *Personal safety - Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing* and by Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets* in collaboration.

This second edition cancels and replaces the first edition (ISO 13688:1998), which has been technically revised to include the following changes:

- A statement that this International Standard (and pictogram) is intended to be used in combination with another product standard was added to the Scope.
- Additional definitions on waist to waist over the shoulder length, and torso.
- Notes on level of performance moved to informative Annex A.
- Clause 4 on ergonomics changed to basic health and ergonomic requirements and revised into separate sub-sections: general (4.1), innocuousness (4.2), design (4.3) and comfort (4.4).
- Informative Annex C added on ergonomic features.
- Subclause 5.2 on colour fastness removed.
- Subclause 5.3 on cleaning renamed as washing and dry-cleaning (5.2) now includes reference to standardised processes, including industrial washing.
- Strengthened provisions in 5.3 on dimensional change due to cleaning.
- The size designation system in Clause 6 was simplified with regard to intervals and ranges to allow more freedom to obtain a better individual fit.
- Subclause 7.2 on specific marking amended to include qualification labelling for industrial laundry care.
- Informative Annex B (Flow chart) added on acceptability of materials.
- Informative Annex F added on environmental aspects.