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**Martial arts — Protective equipment  
for martial arts —**

**Part 9:  
Additional requirements and test  
methods for Wushu Sanda head  
protectors**

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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.

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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 83, *Sports and other recreational facilities and equipment*, Subcommittee SC 6, *Martial arts*.

A list of all parts in the ISO 21924 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Wushu Sanda, an important component of Chinese Wushu (martial arts), is a sport of one-on-one combat involving kicking, striking, wrestling, etc. As attacks to the head and main body are allowed in combat, head protectors are adopted to protect the head and to reduce injuries.

Though Wushu Sanda head protectors are sold and used all over the world, they vary considerably in quality. As no standard has been established to prescribe relevant requirements, the inconsistency in production processes and quality inspections have become the main constraint on the development of this product.

The establishment of this document provides a technical guideline for manufacturers and consumers, and will help to standardize the production and quality control of Wushu Sanda head protectors to further promote international trade and Wushu Sanda and to safeguard the interests of consumers.

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# Martial arts — Protective equipment for martial arts —

## Part 9:

# Additional requirements and test methods for Wushu Sanda head protectors

## 1 Scope

This document specifies the terms and definitions, product structure, classification, requirements and test methods of head protectors for Wushu Sanda.

This document is applicable to Wushu Sanda head protectors sewn with polyurethane (PU) synthetic leather, polyvinyl chloride (PVC) artificial leather, foamed plastic products and other materials.

## 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 105-E04, *Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration*

ISO 105-X12, *Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing*

ISO 1856, *Flexible cellular polymeric materials — Determination of compression set*

ISO 2439, *Flexible cellular polymeric materials — Determination of hardness (indentation technique)*

ISO 3071, *Textiles — Determination of pH of aqueous extract*

ISO 3377-1, *Leather — Physical and mechanical tests — Determination of tear load — Part 1: Single edge tear*

ISO 4045, *Leather — Chemical tests — Determination of pH and difference figure*

ISO 8307, *Flexible cellular polymeric materials — Determination of resilience by ball rebound*

ISO 11640, *Leather — Tests for colour fastness — Colour fastness to cycles of to-and-fro rubbing*

ISO 11641, *Leather — Tests for colour fastness — Colour fastness to perspiration*

ISO 13937-2, *Textiles — Tear properties of fabrics — Part 2: Determination of tear force of trouser-shaped test specimens (Single tear method)*

ISO 14184-1, *Textiles — Determination of formaldehyde — Part 1: Free and hydrolysed formaldehyde (water extraction method)*

ISO 14362-1, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres*

ISO 14362-3, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene*

ISO 17226-1, *Leather — Chemical determination of formaldehyde content — Part 1: Method using high performance liquid chromatography*

ISO 17234-1, *Leather — Chemical tests for the determination of certain azo colorants in dyed leathers — Part 1: Determination of certain aromatic amines derived from azo colorants*

ISO 17234-2, *Leather — Chemical tests for the determination of certain azo colorants in dyed leathers — Part 2: Determination of 4-aminoazobenzene*

ISO 17076-1, *Leather — Determination of abrasion resistance — Part 1: Taber 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:

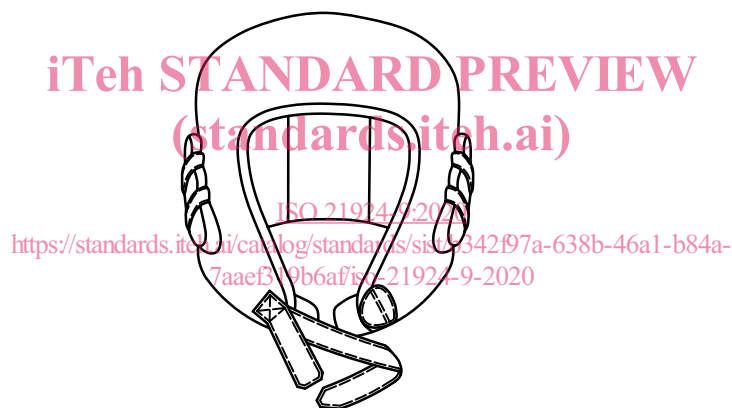
- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **Wushu Sanda head protector**

protective gear to protect the head when practicing, performing or demonstrating Wushu Sanda

Note 1 to entry: See [Figure 1](#).



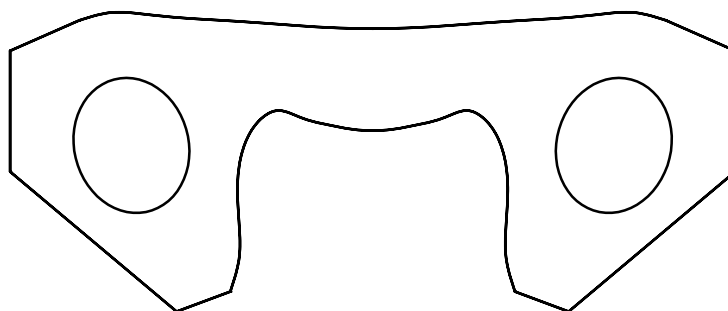
**Figure 1 — Wushu Sanda head protector**

#### 3.2

##### **main body**

part to protect the forehead and both sides of the head

Note 1 to entry: See [Figure 2](#).

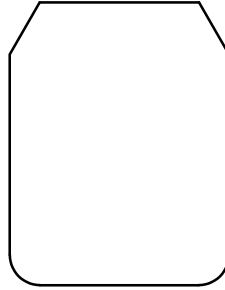


**Figure 2 — Main body**

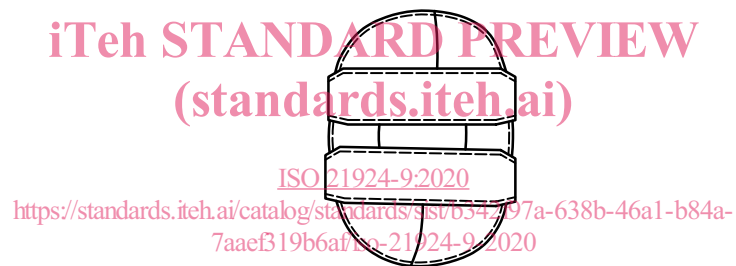


**3.3****protector of the back of the head**

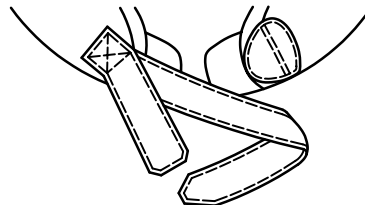
part to protect the back of the head

Note 1 to entry: See [Figure 3](#).**Figure 3 — Protector of the back of the head****3.4****ear protector**

part to protect the ears

Note 1 to entry: See [Figure 4](#).**Figure 4 — Ear protector****3.5****locking strap**

part at the bottom of the head protector as a component of the restraint system

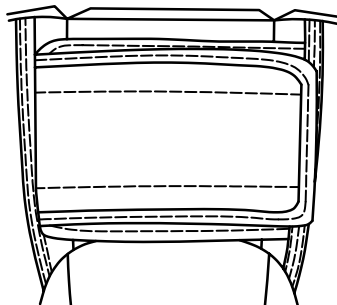
Note 1 to entry: See [Figure 5](#).**Figure 5 — Locking strap**

### 3.6

#### **hook and loop fastener**

part at the back of the head protector as a component of the restraint system

Note 1 to entry: See [Figure 6](#).



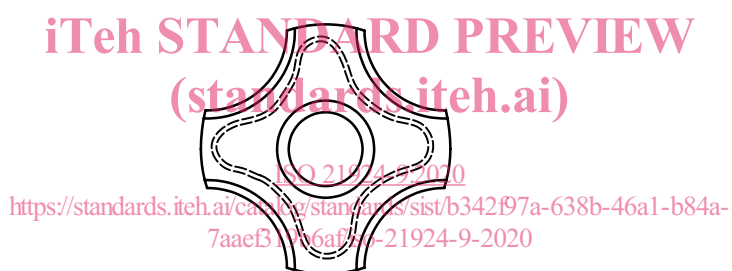
**Figure 6 — Hook and loop fastener**

### 3.7

#### **top cover**

part at the top of the head protector as a component of the restraint system

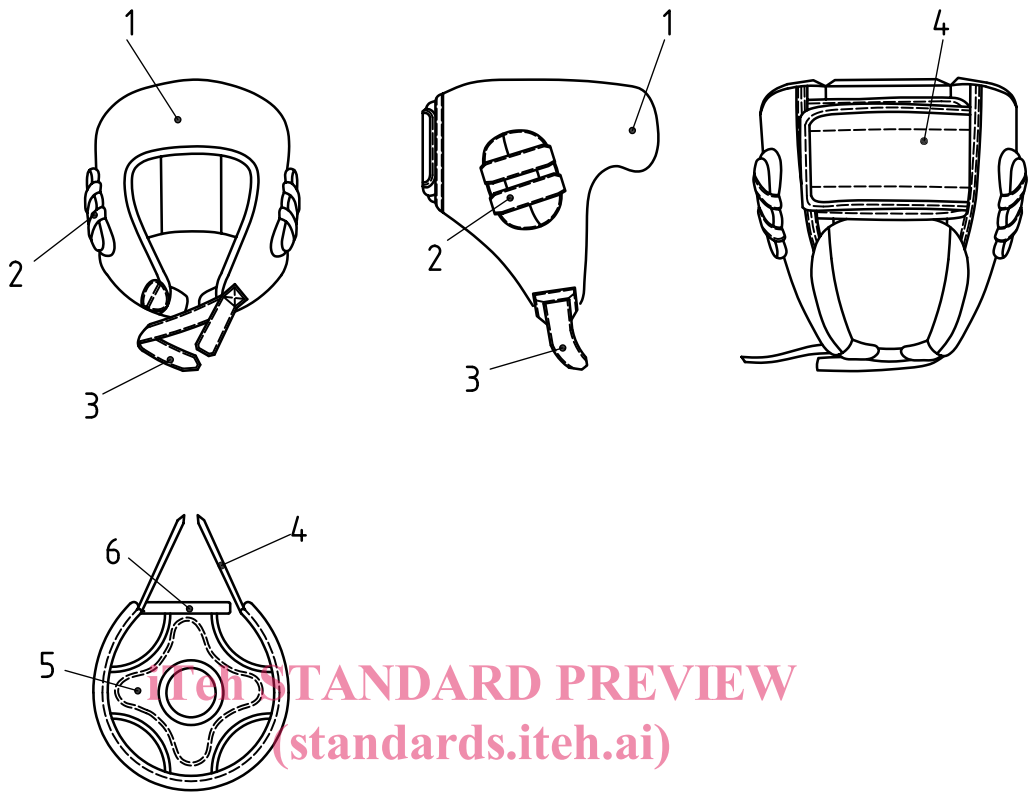
Note 1 to entry: See [Figure 7](#).



**Figure 7 — Top cover**

4 Structure

The structure of a Wushu Sanda head protector is shown in Figure 8.



Key

- 1 main body
- 2 ear protector
- 3 locking strap

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- 4 hook and loop fastener
  - 5 top cover
  - 6 protector of the back of the head

Figure 8 — Structure of Wushu Sanda head protector