

English Version

## Textiles and textile products - Community face coverings - Minimum requirements, methods of testing and use

Textiles et produits textiles - Masques grand public -  
Exigences minimales, méthodes d'essai et utilisation

Textilien und textile Produkte - Alltagsmasken -  
Mindestanforderungen, Prüfverfahren und  
Verwendung

This Technical Specification (CEN/TS) was approved by CEN on 19 September 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## European foreword

This document (CEN/TS 17553:2022) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

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

This document supersedes CWA 17553:2020.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

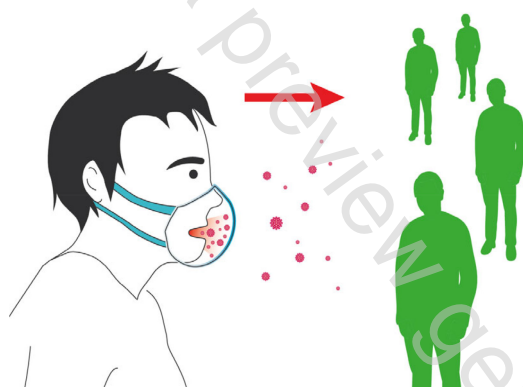
## Introduction

The use of community face coverings was acknowledged during the SARS-CoV-2 pandemic as part of a comprehensive strategy of measures. They are intended for use by people in areas of known or suspected community or cluster transmission of respiratory infection. Typically, the general public wear community face coverings in indoor (for example, shops, shared workplaces, schools, transport, etc.) and outdoor settings where physical distancing can be impractical. Further guidance on where the general public may be encouraged to use community face coverings, is given by national or local health authorities and through World Health Organization recommendation[1].

Community face coverings are not suitable for children up to 4 years of age. It is recommended that children between 4 and 12 years of age are supervised while wearing the community face covering.

NOTE 1 The minimum age criteria can be higher if required by national legal provisions or as advised by national health professionals.

**The wearing of a community face covering, schematically shown in Figure 1, reduces the projection of the wearer's respiratory droplets of saliva, sputum or respiratory secretions when talking, coughing or sneezing. A community face covering might also reduce penetration of the respiratory droplets from an external source to a wearer's nose and mouth, without claiming protection for the wearer. It might also reduce how often a wearer touches his/her face with the hands.**



**Figure 1 — Limitation of the respiratory droplets projection to the environment**

This document specifies the functional and performance levels for community face coverings together with information for use, marking, labelling and packaging. The appropriate test methods are also defined.

**IMPORTANT — Community face coverings are not subject to a mandatory conformity assessment by notified bodies or laboratories. Their design in accordance with accepted best practices and production quality control remain the producer's responsibility. The producer may need to call upon a laboratory to verify the required performance.**

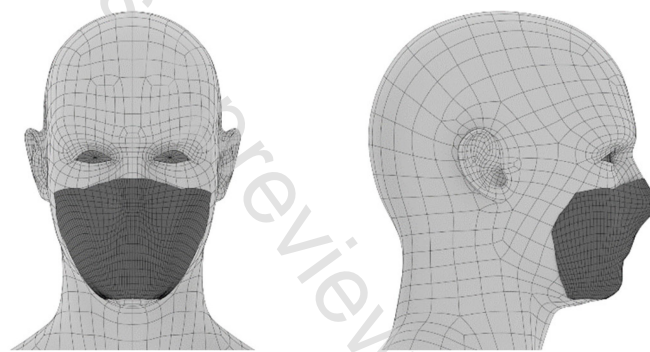
**IMPORTANT — The community face coverings specified in this document are not medical devices (MD) within the meaning of Regulation EU/2017/745, nor are they personal protective equipment (PPE) within the meaning of Regulation EU/2016/425.**

The informative Annex G lists topics of further investigation which might lead to necessary improvement of the safety requirements of the community face coverings.

# 1 Scope

This document specifies the minimum requirements for reusable or single use community face coverings intended for the general public, covering the nose, mouth and chin (for minimum coverage area, see Figure 2) in order to reduce the risk of droplet/aerosol projection towards nearby people. These requirements include:

- innocuousness,
- design (including fit),
- performance,
- test methods,
- marking,
- packaging,
- information for use.



**Figure 2 — Community face coverings minimum coverage area (dark area)**

These requirements are applicable to:

- community face coverings made of one or multiple fabric layers (including woven, knitted, nonwoven), and including community face coverings with a removable filter in between the layers;
- community face coverings including a transparent window which allows for the wearer's mouth and facial expressions to be seen, in order to facilitate full facial recognition, lip reading and/or sign language alongside other methods of communication (see A.6);
- structured community face coverings including moulded plastic shells and rigid face coverings' components.

This document is not intended for community face coverings for children up to 4 years of age (it means until 3 years and 11 months) (see A.1).

This document is not intended for medical face masks (medical devices specified in EN 14683), nor for filtering masks to protect against particles (personal protective equipment specified in EN 149).

This document excludes impermeable nose and mouth shields (including visors) and face coverings incorporating inhalation and/or exhalation valve(s) (see A.2).

## 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.

EN 13274-3:2001, *Respiratory protective devices - Methods of test - Part 3: Determination of breathing resistance*

EN 14683:2019+AC:2019, *Medical face masks - Requirements and test methods*

EN ISO 6330, *Textiles - Domestic washing and drying procedures for textile testing (ISO 6330)*

EN ISO 7500-1, *Metallic materials - Calibration and verification of static uniaxial testing machines - Part 1: Tension/compression testing machines - Calibration and verification of the force-measuring system (ISO 7500-1)*

EN ISO 9237:1995, *Textiles - Determination of permeability of fabrics to air (ISO 9237:1995)*

EN ISO 16890-2:2016, *Air filters for general ventilation - Part 2: Measurement of fractional efficiency and air flow resistance (ISO 16890-2:2016)*

ISO 21501-1, *Determination of particle size distribution — Single particle light interaction methods — Part 1: Light scattering aerosol spectrometer*

ISO 21501-4, *Determination of particle size distribution — Single particle light interaction methods — Part 4: Light scattering airborne particle counter for clean spaces*

## 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 <https://www.electropedia.org/>

### 3.1

#### **aerosol**

suspension of solid, liquid, or solid and liquid particles in a gaseous medium, having a negligible falling velocity

[SOURCE: EN 16972:2020, 3.6 without “(3.170)” and “(generally considered to be less than 0,25 m/s)”]

### 3.2

#### **air permeability**

volume of air per unit surface area (square metre or m<sup>2</sup>) and unit time (second or s) passing perpendicularly through a fabric under the specified test conditions (surface area, pressure loss and duration)

### 3.3

#### **breathing resistance**

resistance of community face coverings to the flow of inhaled air (inhalation resistance) or exhaled air (exhalation resistance)