

Personal eye-protection — Vocabulary

The European Standard EN 165:1995 has the status of a
British Standard

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee PH/2, Eye protection, upon which the following bodies were represented:

- Electricity Association
- Engineering Equipment and Materials Users' Association
- Federation of Manufacturing Opticians
- Flat Glass Manufacturers' Association
- Institution of Gas Engineers
- Institution of Mechanical Engineers
- Institution of Occupational Safety and Health
- Light Metal Founders' Association
- Manufacturing Science Finance
- National Radiological Protection Board
- Safety Equipment Distributors' Association
- Safety Equipment Association
- Trades Union Congress
- Zinc Alloy Die Casters' Association
- Department of Trade and Industry (National Physical Laboratory)
- Ministry of Defence
- Health and Safety Executive
- Co-opted members

This British Standard, having been prepared under the direction of the Health and Environment Sector Board, was published under the authority of the Standards Board and comes into effect on 15 May 1996

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The following BSI references relate to the work on this standard:
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National foreword

This British Standard has been prepared by Technical Committee PH/2 and is the English language version of EN 165 *Personal eye-protection — Vocabulary*, published by the European Committee for Standardization (CEN). It supersedes BS 6967:1988 which is withdrawn.

Terminology and conventions

The text of the European Standard may use some terminology and conventions that differ from those commonly used in British Standards.

Textual error. When adopting the text of the European standard, the textual errors given below were discovered.

pr EN 173 *Personal eye-protection — Visors for motorcycle helmets* listed in the Scope has been withdrawn from the CEN work programme.

The equation for luminous transmittance has been found to be incorrect in the English version of the ratified text. The correct equation, as found in the French version, has been published here.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Personal eye-protection — Vocabulary

Protection individuelle de l'oeil — Vocabulaire Persönlicher Augenschutz — Wörterbuch

This European Standard was approved by CEN on 1995-06-02. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 85 Eye-protection equipment, of which the secretariat is held by AFNOR.

This European Standard supersedes EN 165:1986.

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 January 1996, and conflicting national standards shall be withdrawn at the latest by January 1996.

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

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

1 Scope

This European Standard defines and explains the principal terms used in the field of personal eye-protection in the following (draft) ENs:

EN 166, *Personal eye-protection — Specifications.*

EN 167, *Personal eye-protection — Optical test methods.*

EN 168, *Personal eye-protection — Non-optical test methods.*

EN 169, *Personal eye-protection — Filters for welding and related techniques — Transmittance requirements and recommended utilisation.*

EN 170, *Personal eye-protection — Ultraviolet filters — Transmittance requirements and recommended utilisation.*

EN 171, *Personal eye-protection — Infrared filters — Transmittance requirements and recommended utilisation.*

EN 172, *Personal eye-protection — Sunglare filters for industrial use.*

prEN 173, *Personal eye-protection — Visors for motorcycle helmets.*

prEN 174, *Personal eye-protection — Ski goggles for downhill skiing.*

EN 207, *Personal eye-protection — Filters and eye-protection against laser radiation.*

EN 208, *Personal eye-protection — Eye-protectors for adjustment work on laser and laser systems (laser adjustment eye-protectors).*

EN 379, *Personal eye-protection — Welding filters with switchable luminous transmittance and welding filters with dual luminous transmittance.*

The table in Annex A gives the spectral distribution of solar radiation energy in the infra-red spectrum.

The terms and their definitions in this European Standard are based on those in ISO 4007, ISO 31-6 and CIE Publication 17.4. In parts, these definitions have been simplified. Where they have been adopted word for word, reference is made to the source.

ISO 4007, *Personal eye-protectors — Vocabulary.*

ISO 31-6, *Quantities and units — Light and related electromagnetic radiations.*

CIE 17.4, *International lighting vocabulary.*

Directions for the use of this vocabulary

This vocabulary exists in three languages:

- English
- French
- German

The vocabulary has been prepared as a separate document in each of these three languages.

The terms are listed in alphabetical order.

In the English version, each English term is followed by the German and French translation. The numbers (in brackets) after each French and German term refer to the sequential number under which it is listed in the French or German version.

2 Terms and definitions

2.1

absorption

absorption (2.1)

absorption (2.1)

conversion of radiant energy into a different form of energy by interaction with matter

reference CIE 17.4:845-04-74

2.2

achromatic lens

achromat (2.2)

lentille achromatique; Achromat (2.73)

a system of lenses in which the images for two wavelengths, i.e. for the colour red and blue, positioned at the same point of the optical axis, is called achromatic. The system consists of a collective lens and scattering lens made of different types of glass

2.3

air-arc cutting; arc gouging

lichtbogenfugenhobeln (2.58)

gougeage à l'arc (2.55)

one of the thermal cutting methods, but using an arc

2.4

arc welding

lichtbogenschweissen (2.59)

soudage à l'arc (2.123)

electric welding method, using an arc that is generated between the rod-shaped metal electrode and workpiece. The electrode melting in the hot arc is used as the filler metal for the welded joint

2.5

astigmatic power; Astigmatism

astigmatische Wirkung; Astigmatismus (2.3)

puissance astigmatique; Astigmatisme (2.105)

the difference of the maximum powers in the two principal meridians perpendicular to each other

Unit	reciprocal meter	m ⁻¹
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Called	dioptre	dpt
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2.6

attenuation quotient *Q*

schwächungsquotient *Q* (2.100)

quotient d'atténuation visuel relatif *Q* (2.109)