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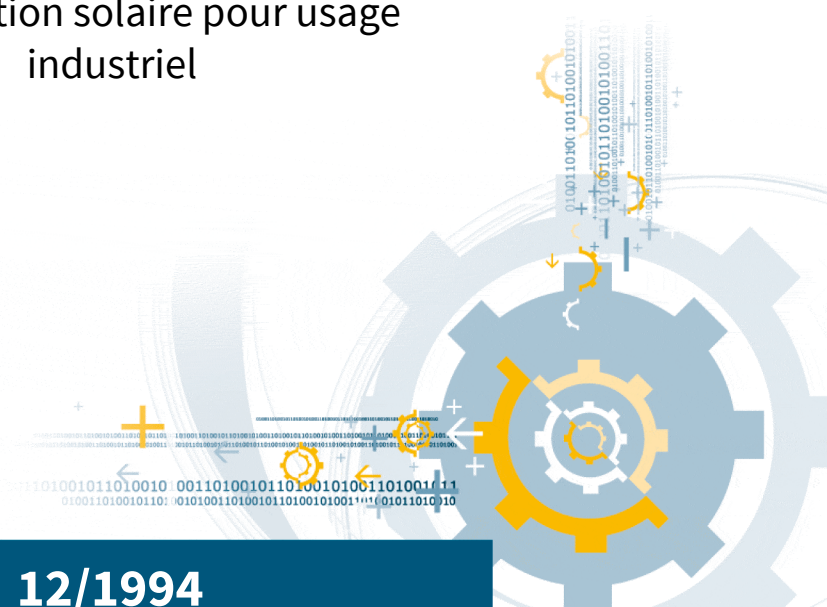
ILNAS-EN 172:1994

Personal eye protection - Sunglare filters for industrial use

Persönlicher Augenschutz -
Sonnenschutzfilter für den betrieblichen
Gebrauch

Protection individuelle de l'oeil - Filtres
de protection solaire pour usage
industriel

12/1994



National Foreword

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EUROPEAN STANDARD

ILNAS-EN 172:1994

EN 172

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 1994

ICS 13.340.20

Descriptors: Accident prevention, eyes, radiation protection, solar radiation, sunlight, optical filters, designation, specifications, physical properties, transmittance, tests, labelling

English version

Personal eye protection - Sunglare filters for industrial use

Protection individuelle de l'oeil - Filtres de protection solaire pour usage industriel

Persönlicher Augenschutz - Sonnenschutzfilter für den betrieblichen Gebrauch

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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 was prepared by the Technical Committee CEN/TC 85 "Eye-protective equipment" of which the secretariat is held by AFNOR.

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 or EC Directive(s).

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of an identical text or by endorsement, at the latest by June 1995, and conflicting national standards shall be withdrawn at the latest by June 1995.

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, United Kingdom.

1 Scope

This European Standard specifies the scale numbers, transmittances and related requirements for sunglare filters for industrial use. Other valid requirements for these types of filters are specified in prEN 166.

Selection criteria and information on use of these filters are given in Annex A.

This standard does not apply to filters for protection against radiation from artificial light sources such as those used in solaria. EN 170 applies for these filters.

This standard does not apply to ski goggles for which a separate standard is in preparation or for other types used for leisure activities.

A separate standard for sunglasses and sunglare filters for general use is in preparation.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

prEN 165	Personal eye protection - Vocabulary
prEN 166	Personal eye protection - Specifications
prEN 167	Personal eye protection - Optical test methods
prEN 168	Personal eye protection - Non-optical test methods
EN 169	Personal eye protection - Filters for welding and related techniques
EN 170	Personal eye protection - Ultra-violet filter - Transmittance requirements and recommended use

CIE Publication 15 Colorimetry

3 Designation and marking

A complete table of filter designation and marking is given in clauses 4 and 9 of prEN 166.

The scale number of a sunglare filter contains the code numbers 5 (filter with no requirement for protection in the infra-red) or 6 (filter with a requirement for protection in the infra-red) and the shade number of the filter (see clause 4 and Annex A.2).

4 Requirements

The requirements of prEN 166 apply to sunglare filters for industrial use. Only those requirements that are different from or supplement the prEN 166 specifications are given in the following.

4.1 Permissible transmittance and scale numbers

4.1.1 Filters with code number 5

Table 1 : Permissible transmittance for filters without a requirement for infra-red protection

Scale number	Ultraviolet spectral range			Visible spectral range	
	Maximum value of spectral transmittance τ (λ)		Maximum mean value of spectral transmittance	Range of luminous transmittance	
	from 280 nm to 315 nm	over 315 nm to 350 nm		from τ_V %	to over τ_V %
5-1,1 ¹⁾				100	80,0
5-1,4				80,0	58,1
5-1,7	0,1 τ_V	τ_V	τ_V	58,1	43,2
5-2				43,2	29,1
5-2,5				29,1	17,8
5-3,1	0,01 τ_V	0,5 τ_V	0,5 τ_V	17,8	8,0
5-4,1				8,0	3,0

¹⁾ This scale number only applies to certain photochromic sunglare filters in their clear condition and for the high luminous transmittance range of gradient filters.