

This is a preview of "ISO 12609-1:2013". [Click here to purchase the full version from the ANSI store.](#)

First edition
2013-07-15

Eyewear for protection against intense light sources used on humans and animals for cosmetic and medical applications —

Part 1: Specification for products

Équipements ophtalmiques de protection contre les sources lumineuses intenses utilisées sur les animaux et les humains pour des applications médicales et cosmétiques —

Partie 1: Spécifications des produits



Reference number
ISO 12609-1:2013(E)

© ISO 2013



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 12609-1:2013". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Transmittance	2
4.1 General.....	2
4.2 F-classification.....	2
4.3 B-classification.....	3
4.4 Luminous transmittance.....	4
5 Colour recognition	4
5.1 General.....	4
5.2 Colour of the protective filters.....	5
6 Auto darkening filters	5
7 Construction of eye protectors	6
7.1 General.....	6
7.2 Frames and side shields.....	6
7.3 Materials.....	6
7.4 Adjustment.....	6
7.5 Removal of filters.....	7
7.6 Material and surface quality.....	7
7.7 Field of view.....	7
7.8 Optical properties.....	7
7.9 Resistance to ignition.....	8
7.10 Resistance to ageing by UV radiation.....	8
7.11 Resistance to thermal ageing.....	8
8 Labelling	8
9 Information to be supplied by the manufacturer	9
Annex A (informative) Filter protection factor (FPF)	10
Annex B (informative) Calculation of FPF for protective eyewear — Example 1	12
Annex C (informative) Calculation of FPF for protective eyewear — Example 2	15
Annex D (informative) Spectral hazard weighting functions	18
Annex E (normative) Test method for narrow angle scattering (diffusion of light)	21
Annex F (normative) Test for resistance to ignition	27
Annex G (normative) Test for resistance to ultraviolet radiation	28
Annex H (normative) Test for stability at elevated temperature	29
Bibliography	30

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. 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. 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.

The committee responsible for this document is ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 6, *Eye and face protection*.

ISO 12609 consists of the following parts, under the general title *Eyewear for protection against intense light sources used on humans and animals for cosmetic and medical applications*:

- *Part 1: Specification for products*
- *Part 2: Guidance for use*