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EYE PROTECTORS FOR INDUSTRIAL APPLICATIONS

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The following interests are represented on Committee SF/6:

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AUSTRALIAN STANDARD

EYE PROTECTORS FOR INDUSTRIAL APPLICATIONS

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PREFACE

This edition of this standard was prepared by the Association's Committee on Eye Protection at the request of the Safety Standards Board, to supersede AS 1337—1981. It specifies requirements for eye protectors and their associated lenses, designed to protect the eyes against common industrial hazards.

This edition of the standard includes technical and editorial amendments identified as necessary during the application of the 1981 edition.

Requirements for optical qualities and mechanical strength are given and the standard includes appendices describing appropriate test methods.

To facilitate the supply and replacement of lenses for eye protectors bearing the AS Mark, the requirements for lenses suitable for marking are set out in a separate Section.

It should be recognized that complete protection for the eyes cannot be provided solely by the use of eye protectors. Relevant factors for a particular application should be considered in the choosing of the correct eyewear to provide the maximum possible protection. AS 1336, Recommended Practices for Eye Protection in the Industrial Environment, should be consulted for the appropriate measures to be taken into account.

This standard does not apply to filters for protection against ultraviolet and infrared radiations. For details regarding such filters, reference should be made to AS 1338, Filters for Eye Protectors.

The material and optical requirements described in this standard maintain uniformity where appropriate with the following standards:

AS 1067 Sunglasses and Fashion Spectacles—Non-prescription Types

AS 1609 Eye Protectors for Motor Cyclists and Racing Car Drivers

AS 2228 Spectacle Lenses

CONTENTS

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
EYE PROTECTORS FOR INDUSTRIAL APPLICATIONS

SECTION 1. SCOPE, APPLICATION AND DEFINITIONS

1.1 SCOPE. This standard specifies requirements for eye protectors and associated lenses designed to provide protection for the eyes of persons in industrial undertakings against hazards such as flying particles and fragments, dusts, splashing materials and molten metals, harmful gases and vapours and aerosols. The standard does not apply to filter lenses for protection against harmful radiations, such lenses being covered in AS 1338.

1.2 APPLICATION. Lenses for eye protectors shall comply with the requirements of Section 2.

Eye protectors shall comply with the requirements of Section 3 or Section 4, as appropriate.

NOTE: Where eye protection is incorporated in protective equipment, such as a hood or respirator, the portion affording eye protection should comply with relevant requirements of this standard.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1067	Sunglasses and Fashion Spectacles—Non-prescription Types
AS 1152	Test Sieves
AS 1180	Methods of Test for Hose Made from Elastomeric Materials 1180.9A—Hardness of Vulcanized Rubbers of Standard Hardness (35 to 85 IRHD)
AS 1199	Sampling Procedures and Tables for Inspection by Attributes
AS 1336	Recommended Practices for Eye Protection in the Industrial Environment
AS 1338	Filters for Eye Protectors
AS 1399	Guide to AS 1199, Sampling Procedures and Tables for Inspection by Attributes
AS 1680	Code of Practice for Interior Lighting and the Visual Environment
BS 2461	Gas Washing Bottles
BS 4727	Glossary of Electrotechnical, Power, Telecommunication, Electronics, Lighting and Colour Terms Part 4: Group 01:1971 Radiation and Photometry

1.4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.4.1 Eye protector—a device which includes a lens or lenses worn in front of the eyes and intended to provide protection for the eyes.

1.4.2 Goggle designation—goggles are designated by the following types:

1.4.2.1 *Goggles*—an eye protector fitting the contour of the face and held in position by an adjustable headband.

1.4.2.2 *Eyecup goggles*—an eye protector consisting of two lenses mounted in cups supported by a flexible nose bridge and headband.

1.4.2.3 *Wide-vision goggles*—an eye protector in which the lens or lenses extend over the full width of the face, affording a large field of vision.

1.4.2.4 *Coverall goggles*—an eye protector designed to fit closely over vision-correcting spectacles.

1.4.3 Safety clip-ons—a pair of protective lenses designed to clip-on over the front of non-safety spectacles.

1.4.4 Welding helmet—a rigid eye protector which is worn by the operator to shield the eyes, face, forehead and front of the neck.

1.4.5 Welding handshield—a rigid eye protector which is held in the hand to shield the eyes, face, forehead and front of the neck.

1.4.6 Faceshield—a device which includes a transparent visor, supported in front of the face to shield the eyes, face, forehead and front of the neck.

1.4.7 Eyeshield—a transparent visor supported in front of the face to shield the eyes.

1.4.8 Hood—a device which covers the head and neck and which includes eye protection.

1.4.9 Safety spectacles—an eye protector with protective lenses mounted in spectacle-type frames, or integrally moulded into the frames with or without side shields, and held in position by the side arms.

1.4.10 Wire-mesh screen—a device which consists of woven metal gauze supported in front of the face and incorporates a transparent lens in front of the eyes.

1.4.11 Lens—

(a) *Unfitted lens*—an optical component in its finished state intended for fitting in an eye protector.

(b) *Fitted lens*—the optical component of an eye protector and fitted in the eye protector.

1.4.12 Filter—an optical material used to absorb and/or reflect harmful radiation emitted during welding and other industrial operations. It may be of plastics, solid glass, laminated construction or other suitable material.

1.4.13 Double glazed lenses—lenses consisting of two or more components separated by an air gap and with the normal line of sight passing through all the components.