

Australian/New Zealand Standard™

## Filters for eye protectors

### Part 1: Filters for protection against radiation generated in welding and allied operations



## **AS/NZS 1338.1:2012**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-006, Eye and Face Protection. It was approved on behalf of the Council of Standards Australia on 13 June 2012 and on behalf of the Council of Standards New Zealand on 18 June 2012.

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The following are represented on Committee SF-006:

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Australian Dispensing Opticians Association  
Australian Industry Group  
Economic Development Agencies of New Zealand  
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### Part 1: Filters for protection against radiation generated in welding and allied operations

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-006, Eye and Face Protection, to supersede AS/NZS 1338.1:1992, *Filters for eye protectors, Part 1: Filters for protection against radiation generated in welding and allied operations*.

The objective of this Standard is to specify requirements for filters used in eye protectors intended to provide protection against radiation of high intensity emitted during welding and allied operations.

The objective of this revision is to bring the Standard in line with current Australian practice. It is planned to eventually adopt an ISO Standard as a Joint Australian/New Zealand Standard.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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## FOREWORD

In welding operations the maximum possible protection is given to the eyes of welders when the filter in the eye protector being worn has the correct shade number for the work being performed; filters that are too light or insufficiently dense for the job in hand may result in temporary or permanent eye damage, and the use of filters that are too dense, i.e. with shade numbers that are too high for task being done, will lead to poor quality welding and the possibility of injury by accident. The guidelines provided in AS/NZS 1336, *Recommended practices for occupational eye protection*, should be closely followed.

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**Filters for eye protectors**

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S E C T I O N 1 S C O P E A N D G E N E R A L

**1.1 SCOPE**

This Standard specifies requirements for filters used in eye protectors intended to provide protection against radiation of high intensity emitted during welding and allied operations. It specifies the shade numbers and the transmittance requirements of the filters and applies to filters made of glass or other materials for absorption of radiation.

Other performance requirements applicable to assembled eye protectors for welding incorporating welding filters are given in AS/NZS 1337.1.

This Standard also applies to cover plates employed for the protection of filters from damage by abrasion and weld spatter, and to filters incorporated in demonstration welding booths in so far as the relevant requirements of Table 2.1 and Table 2.2 are appropriate. Requirements for welding curtains and screens are covered in AS/NZS 3957.

NOTE: Guidance on the selection of filters is given in Appendix A.

**1.2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS

2812 Welding, brazing and cutting of metals—Glossary of terms

AS/NZS

1336 Recommended practices for eye protection in the industrial environment

1337 Personal eye protection

1337.0 Part 0: Eye and face protectors—Vocabulary

1337.1 Part 1: Eye and face protectors for occupational applications

1337.6 Part 6: Prescription eye protectors against low and medium impact

1680 Interior and workplace lighting

1680.1 Part 1: General principles and recommendations

3957 Light-transmitting screens and curtains for welding operations

ISO

11664 Colorimetry

16664-1 Part 1: CIE standard colorimetric observers

16664-2 Part 2: CIE standard illuminants

**1.3 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS/NZS 1337.0 and AS/NZS 1337.1 apply.