# Technical Datasheet



# 3M<sup>™</sup> 2840 Series Safety Spectacles

# **Product Description**

The  $3M^{TM}$  2840 series features an adjustable pantoscopic angle (angle of the lens frame to the temple) and temple arms with adjustable length (3 fixed positions). Models also include an integrated brow-guard for increased protection. The range includes a number of lens options.

# Intended Use

These products are intended for protection against high speed particles at low energy (F) at extreme temperature conditions,  $-5^{\circ}C$  and  $+55^{\circ}C$ , (T) in accordance with EN166:2001.

## **Product Range**

2840	3M <sup>™</sup> 2840 PC Clear AS/AF
2841	3M <sup>™</sup> 2841 PC Grey AS/AF
2842	3M <sup>™</sup> 2842 PC Amber AS/AF
2844	3M <sup>™</sup> 2844 PC Indoor/Outdoor Mirror
2845	3M™ 2845 PC IR Shade 5 AS/AF
2846	3M <sup>™</sup> 2846 PC Red-Orange AS/AF

### **Key Features**

- Design provides excellent coverage and good field of vision
- Optical Class 1 to allow prolonged comfortable wear
- Offers excellent protection against UV radiation
- Simple, stylish design
- Lens coatings provide excellent scratch resistance and antifogging

## Applications

These products can be used in a wide range of applications including:

- Construction
- Engineering
- Fork-lift truck drivers
- General assembly
- Inspection work
- Light duty maintenance and repair
- Welding

#### **Standards and Approval**

This protective eyewear has been shown to meet the basic safety requirements under Article 10 of the European Community Directive 89/686/EEC and is thus CE marked.

These products have been examined at the design stage by INSPEC International Ltd., 56 Leslie Hough Way, Salford, Greater Manchester, M6 6AJ, United Kingdom (Notified Body number 0194). These products are tested and CE approved against EN166:2001.



### Marking

The products have demonstrated compliance with the requirements of EN 166:2001 and associated standards and bear the following marks:

Clear lens	2C-1.2 3M 1 FT
Grey lens	5-2.5 3M 1 FT
Amber lens	2-1.2 3M 1 FT
Indoor/Outdoor lens	5-1.7 3M 1 FT
Shade 5 lens	5 3M 1 FT
Red-Orange lens	2-1.7 3M 1 FT
Frames 2840	3M 2840 CE EN166 FT
Frames 2841	3M 2841 CE EN166 FT
Frames 2842	3M 2842 CE EN166 FT
Frames 2844	3M 2844 CE EN166 FT
Frames 2845	3M 2845 CE EN166 FT
Frames 2846	3M 2846 CE EN166 FT

# **Explanation of Marking**

Marking	Description
<b>2-1.2, 2-1.7</b> and <b>2C-1.2</b> (EN 170:2002)	UV protection. This product conforms to the requirements of the standard, providing UV protection for the complete specified range (210nm – 365nm). Products marked C provide good colour recognition.
<b>5-1.7 and 5-2.5</b> (EN 172:1994 (as amended))	Sun-glare protection conforming to the requirements of the standard, providing UV protection for the complete specified range (280nm – 350nm).
<b>5</b> (EN 169:2002)	Welding lens providing protection against UV for the specified range (210nm to 365nm) and IR protection for the specified range (780nm to 2000nm).
1	Optical class
F	Impact protection against high speed particle at low energy (45m/s)
т	Tested for impact protection at extreme temperature conditions -5°C and +55°C

#### **Use Limitation**

- Never modify or alter this product
- Do not use this product against hazards other than those specified in this document.
- These products are not suitable for grinding or welding
- These products are NOT designed to be worn over prescription spectacles.
- In accordance with EN166:2001 safety spectacles cannot be tested and approved for use against liquid droplets. Where liquid protection is specified a suitable product should be considered, for example safety goggles.

### **Important Notice**

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

#### **3M**



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