



# 2846 Red-Orange Comfort Line Safety Spectacles

## 2846 (Red-orange)



### Technical Fact Sheet

### Description

The 3M 2846 Safety Spectacles are designed to protect against Ultra Violet, and far blue light ranging from 400nm to 530nm.

### Intended Use

This product is intended for protection against high speed particles at low energy (F) at extreme temperature conditions, -5°C and +55°C, (T) in accordance with EN166:2001. It also protects against UV radiation in accordance with EN170:2002, and far blue light ranging from 400nm to 530nm.

This product is suited for use, for example, in the medical, dental and automotive industry.

### Key Features

- Optical class 1 lens for highest optical clarity and extended wear time
- Adjustable lens angle (via temple pivot) for individual fit
- Adjustable temple length (4 positions) for wearer comfort and optimal fit
- Strong polycarbonate lens with anti-scratch and anti-fog coating for improved vision and extended durability
- Integrated brow guard for increased protection
- Lightweight (26g)
- Soft inner padding on temple for increased wearer comfort and stability when worn

### Applications

This product can be used in the following key application:

- Dental
- Automotive
- Medical
- Industrial manufacturing

### Standards and Approval

This product 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.

This product was examined at the design stage by INSPEC International Ltd., Upper Wingbury Courtyard, Wingrave, Aylesbury, Buckinghamshire HP22 4LW (Notified Body number 0194).

The 2846 is tested and CE approved against EN166:2001 1 FT.

### Marking

The lens and frame are marked in accordance with the requirements of EN166:2001, and associated standards including EN170:2002 (for UV protection).

#### Example of lens marking:-

Filter code & scale number for UV protection:	2-1.7 (as per EN170:2002)
Manufacturer's identification:	3M
Optical Class:	1
Symbol for mechanical strength:	F (low energy)

#### Example of frame marking:-

Manufacturer's identification:	3M
Product reference:	2846
European Standard:	EN166

Symbol for resistance to high speed particle test at extremes of temperature FT (low energy)

## Explanation of filter code and scale numbers

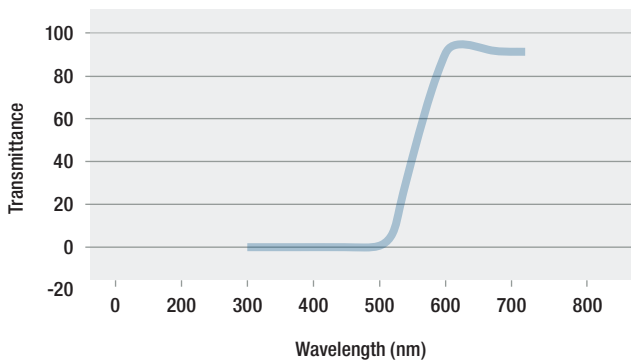
Please see the table below for further information.

Product	Lens Option	Lens Marking	Explanation	Comments
2846	Red/Orange	2-1.7	2: UV Filter code. 1.7: Scale number.	Colour recognition may be affected. For use with far blue light ranging from 400nm to 530nm. Also, for use with sources which emit predominantly ultra violet radiation at wavelengths shorter than 313nm and when glare is not an important factor. This covers the UVC (280nm – 313nm) and most of the UVB (100nm - 280nm) bands.

### Use limitation

- Never modify or alter this product
- Do not use this product against hazards other than those specified in this document/product user instructions.
- These products are not suitable for grinding
- 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
- These products are NOT designed to be worn over prescription spectacles or alter this product
- Do not use this product whilst driving a vehicle

### Spectral Transmittance



### Materials Listing

**Lens:** Polycarbonate

**Temples:** Polycarbonate and Thermoplastic Elastomer (TPE)

### Accessories

**3M 270:** Anti-fog wipe

**3M 271:** Simple neck cord

**3M 272:** Premium neck cord- with safety break

**3M 273:** Soft carry bag for spectacles

### Light Transmission and Absorption Data

Wavelength (nm)	Spectral Transmission (%)
300 to 510	0
520	0.1
530	0.6
540	3.1
550	9.9
560	23.7
570	43.1
580	63.7
590	77.3
600	84.9
610	89.0
620	91.7
630	93.3
640	93.8
650	93.5
660	92.8
670, 680	92.3
690	92.5
700	92.9



#### Occupational Health & Environmental Safety Group

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