

# 3M™ Safety Eyewear Technical Datasheet



## 3M™ Maxim™ Spectacles

### Product description

The Maxim series of protective eyewear has been designed for a wide variety of applications. The range comprises of four different platforms, each platform including a variety of lens colour options that protect against different optical hazards.

The Maxim Ballistic range features an adjustable pantoscopic angle (angle of the lens frame to the temple), providing an optimised fit for the wearer. This model also includes 'soft-touch' temple tips for increased comfort.

The Maxim range incorporates both pantoscopic adjustment and temple arms with adjustable length (4 fixed positions).

The Maxim Hybrid Goggle utilises the same lens as the Maxim spectacles in order to provide a good field of view and excellent coverage. This product variant is fitted with an adjustable headband and foam surround.

In addition to the impact and UV protection offered by the lens, Maxim Hybrid Goggles also provide protection against liquid droplets.

Maxim Sport spectacles feature a 'soft-touch' material that runs along the length of each temple. This is intended to provide additional user comfort and superior grip.

All spectacles within the Maxim Series are fitted with pliable, adjustable nose-pads and a 'soft-touch' brow guard.

### Intended Use:

These products are intended for protection against high speed particles at low energy (F) at extreme temperature conditions, -5°C and +55°C, (T) in accordance with EN 166:2001. The Maxim Ballistic range has also been tested against the STANAG 2920 ballistic standard. The Maxim Hybrid Goggle provides protection against liquid droplets.

### Products include:

Maxim Ballistic	13296-00000M	Maxim Ballistic PC Clear DX
	13297-00000M	Maxim Ballistic PC Bronze DX
	13298-00000M	Maxim Ballistic PC I/O Mirror
	13299-00000M	Maxim Ballistic PC Amber DX
Maxim	13225-00000M	Maxim-Black/Grey PC Clear DX
	13226-00000M	Maxim-Black/Grey PC Bronze DX
	13227-00000M	Maxim-Black/Grey PC I/O Mirror
	13228-00000M	Maxim-Black/Grey PC Amber DX
	13229-00000M	Maxim-Denim/Grey PC Clear DX
	13323-00000M	Maxim-Black PC Weldingshade 3 DX
	13324-00000M	Maxim-Black PC Weldingshade 5 DX
	13325-00000M	Maxim-Black PC Minimizer Mirror
Maxim Hybrid	13330-00000M	Maxim Hybrid Goggle PC Clear DX
Maxim Sport	13240-00000M	Maxim Sport-Silver/Blue PC Clear DX

PC = Polycarbonate

DX = Advanced anti-scratch, anti-fog coating

AS = Anti-scratch coating

AF = Anti-fog coating

A number of lens options are available for a variety of different applications :

- Clear – Good colour recognition and excellent UV protection
- Bronze – Protection from sunglare
- Amber – Enhanced contrast in low light condition e.g. surface inspection
- Indoor/Outdoor – Ideal for use in sunny and low light environment
- Welding – Two shade options available to suit individual needs

### 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
- Multiple features available for increased comfort and adjustability
- Lens coatings provide excellent scratch resistance and anti-fogging
- Maxim Ballistic products meet stringent STANAG 2920 ballistic test

### Applications:

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

- Combat pursuits
- Foundry work
- Engineering
- General assembly
- Woodworking
- Construction

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## 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. In addition, the Maxim Ballistic products meets the requirements of the STANAG 2920 ballistic test.

## Marking:

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

### Lens marking

Clear lens:	2C-1.2	3M	1	FT
Clear lens (Maxim Hybrid):		3M	1	FT
Amber Lens:	2-1.2	3M	1	FT
Bronze lens:	5-3.1	3M	1	FT
Indoor/Outdoor lens:	5-1.7	3M	1	FT
Welding shade 3 lens:	3	3M	1	FT
Welding shade 5 lens:	5	3M	1	FT
Minimizer lens:	6-1.7	3M	1	FT

### Frame marking

Frames:	3M	Maxim	EN166	FT	CE	
Frames:	3M	Maxim Ballistic	EN166	FT	CE	
Frames:	3M	Maxim Sport	EN166	FT	CE	
Frames:	3M	Maxim Hybrid	EN166	3	FT	CE

## Explanation of Marking:

Marking	Description
2-1.2 and 2C-1.2 (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.
5-1.7 and 5-3.1 (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).
6-1.7 (lens marking) (EN 172:1994) (as amended)	Protection against UV for the specified range (280nm to 350nm) and IR protection for the specified range (780nm to 2000nm)
3 and 5 (frame marking) (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).
3	Field of use: Liquid Product protects against liquid droplets
1	Optical class
F	Impact protection against high speed particle at low energy (45m/s)
T	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 designed to be worn over prescription spectacles



## Safety Solutions

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