

# 3M™ SecureFit™ SF500 Series Safety Glasses

## Technical datasheet



### Product description

The 3M™ SecureFit™ 500 is a safety spectacle with:

- ▶ Slim frame
- ▶ 3M™ Pressure Diffusion Temple Technology
- ▶ The 3M™ Scotchgard™ anti-fog coating has been added to some models in the SF500 series. This coating resists fogging longer than traditional anti-fog coatings, up to 25 washes with water\*
- ▶ It helps provide durable scratch resistance in tough work environments
- ▶ The 3M™ Scotchgard™ anti-fog coating is tested to EN 168 K&N for anti-fog and anti-scratch performance
- ▶ Anti-scratch plus option on clear lens and welding shades 1.7, 3.0 and 5.0
- ▶ Lens shades in clear, grey, amber, brown or light brown
- ▶ Lens options in indoor/outdoor grey or silver mirror with anti-fog/anti-scratch coatings
- ▶ Optional foam gasket
- ▶ Typical weight: 22g or 27g with foam gasket

\*3M internal testing per EN 168 test method when compared with traditional anti-fog coatings.

### Key features

- ▶ Optical class 1 lens for prolonged use
- ▶ Single piece ocular lens
- ▶ Rimless ocular frame
- ▶ Adjustable ratchet temples. Multiple position ratchet allows user to adjust lens for facial features and eyeglass position
- ▶ Frame colours in either black, green, red or dark green
- ▶ Low energy Impact Protection (F) at Extremes of Temperature (T) in accordance with EN 166
- ▶ 3M™ Scotchgard™ anti-fog coating providing protection against fogging and scratching, meeting K & N marking requirements of EN 166
- ▶ Polycarbonate lenses labeled UV400 absorb 99.9% of UVA, UVB, and UVC rays between 200 nm and 400 nm
- ▶ 3M™ Scotchgard™ anti-fog coating provides scratch resistance and durability, even after multiple washes
- ▶ Anti-Scratch Plus (ASP) lens options to give enhanced anti-scratch protection, meeting K marking requirement of EN 16

### Key features

- ▶ Removable foam lined insert helps keep debris out of your eyes while providing comfort and cushioning
- ▶ Easily removed for cleaning or to alternate between wearing modes
- ▶ Small vents in the insert can help reduce fogging
- ▶ Insert can be washed with mild soap and water as required

### Typical applications

These products may be suitable for use in a wide variety of applications including:

- ▶ Industrial manufacturing
- ▶ Metal working
- ▶ Construction
- ▶ Food industry
- ▶ Pharmaceutical
- ▶ General laboratory
- ▶ Certain welding applications (1.7, 3.0 and 5.0 lens options)
- ▶ Harsh environments e.g. cement, construction – ASP option

### Intended use

These products are intended for protection against a variety of hazards including low energy impact (F) at extremes of temperature -5°C and +55°C (T) in accordance with EN 166:2001.

These products also help protect against UV radiation in accordance with EN 170:2002 (clear and amber lenses), and sun glare in accordance with EN 172:1994 (grey, brown and indoor/outdoor lenses).

The SF500 lenses are also intended to give an enhanced level of protection against fogging and scratching from the 3M™ Scotchgard™ coating which meets K rating for anti-scratch (AS) and N rating for anti-fog (AF) as per EN 166:2001.

Lenses with the Anti-Scratch Plus (ASP) coating are intended to give an enhanced level of protection against scratching and meets K rating for anti-scratch (AS) as per EN 166:2001.

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

- ▶ Clear – good colour recognition and excellent UV protection
- ▶ Grey – protection from sunglare
- ▶ Amber – enhanced contrast in low light conditions
- ▶ Indoor/outdoor – perfect for workers that move in and out of strong sunlight
- ▶ Brown – for bright conditions and to improve contrast and clarity
- ▶ IR lenses – 1.7, 3.0 and 5.0 – certain welding, cutting and torchwork applications
- ▶ ASP lenses – certain harsh environments

## Product range

Product ID	Product reference	Product description	Lens shade	Frame colour	Lens coating
7100243934	SF501SGAF-RED	Red frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), clear lens, SF501SGAF-RED-EU	Clear	Red	SGAF
7100243142	SF501SGAF-BLK	Black frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), clear lens, SF501SGAF-BLK-EU	Clear	Black	SGAF
7100243964	SF501SGAF-BLK-FM	Black frame, foam, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), clear lens, SF501SGAF-BLK-FM-EU	Clear	Black	SGAF
7100244201	SF502SGAF-BLK	Black frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), grey lens, SF502SGAF-BLK-EU	Grey	Black	SGAF
7100243995	SF507SGAF-BLK	Black frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), Indoor/Outdoor Light Grey lens, SF507SGAF-BLK-EU	I/O light grey	Black	SGAF
7100243971	SF501SGAF-GRN	Green frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), clear lens, SF501SGAF-GRN-EU	Clear	Green	SGAF
7100243980	SF503SGAF-BLK	Black frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), amber lens, SF503SGAF-BLK-EU	Amber	Black	SGAF
7100244022	SF505SGAF-DGR	Dark green frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), brown lens, SF505SGAF-DGR-EU	Brown	Dark green	SGAF
7100244062	SF528SGAF-DGR	Dark green frame, 3M™ Scotchgard™ anti-fog/anti-scratch coating (K&N), light brown lens, SF528SGAF-DGR-EU	Light brown	Dark green	SGAF
7100243963	SF509AF-BLK	Black frame, anti-scratch/anti-fog clear silver mirror lens, SF509AF-BLK-EU	Silver mirror	Black	AS-AF
7100244045	SF501AF-BLK	Black frame, anti-scratch/anti-fog clear lens, SF501AF-BLK-EU	Clear	Black	AS-AF
7100243979	SF501ASP-BLK	Black frame, anti-scratch+ (K), clear lens, SF501ASP-BLK-EU	Clear	Black	ASP
7100243977	SF517ASP-GRN	Green/black frame, anti-scratch + (K), IR 1.7 grey lens, SF517ASP-GRN-EU	IR 1.7 grey	Green/black	ASP
7100243989	SF530ASP-GRN	Green/black frame, anti-scratch + (K), IR 3.0 grey lens, SF530ASP-GRN-EU	IR 3.0 grey	Green/black	ASP
7100243978	SF550ASP-GRN	Green/black frame, anti-scratch + (K), IR 5.0 grey lens, SF550ASP-GRN-EU	IR 5.0	Green/black	ASP
7100243943	SF500-FOAM	3M™ SecureFit™ 500 foam insert, S500-FOAM-EU	N/A	N/A	N/A

SGAF = ScotchGard™ anti-fog coating    I/O = Indoor/outdoor    AF = anti-fog    AS = Anti-scratch    ASP = Anti-scratch plus

## 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

## Standards and approval

These products are type examined by Certottica SCRL, Ufficio Commerciale – test e certificazione, ZI Villanova K32013 Longarone BL, Italy, (Notified body number 0530).

These products are CE marked to the requirements of European Regulation (EU) 2016/425.

The applicable legislation can be determined by reviewing the Certificate and Declaration of Conformity at [www.3M.com/Eye/certs](http://www.3M.com/Eye/certs)

## Materials listing

Component	Material
Lens	Polycarbonate
Frame	Polycarbonate/polyester
Temple end pieces	Nylon
Gasket frame	Nylon
Gasket	EVA foam
Screws	Stainless steel

## Marking

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

Product ref (short ID)	Lens marking	Frame marking
SF501SGAF-BLK	2C-1.2 3M 1 FT KN	3M EN 166 FT
SF501SGAF-GRN	2C-1.2 3M 1 FT KN	3M EN 166 FT
SF501SGAF-RED	2C-1.2 3M 1 FT KN	3M EN 166 FT
SF502SGAF-BLK	5-3.1 3M 1 FT K N	3M EN 166 FT
SF503SGAF-BLK SGAF	2C-1.2 3M 1 FT K N	3M EN 166 FT
SF505SGAF-DGR	5-2.5 3M 1 FT K N	3M EN 166 FT
SF507SGAF-BLK	5-1.7 3M 1 FT K N	3M EN 166 FT
SF528SGAF-DGR	5-1.4 3M 1 FT K N	3M EN 166 FT
SF501AF-BLK	2C-1.2 3M 1 FT	3M EN166 FT
SF509AF-BLK	5-3.1 3M 1 FT	3M EN166 FT
SF501ASP-BLK	2C-1.2 3M 1 FT K	3M EN166 FT
SF517ASP-GRN	1.7 3M 1 FT K	3M EN166 FT
SF530ASP-GRN	3 3M 1 FT K	3M EN166 FT
SF550ASP-GRN	5 3M 1 FT K	3M EN166 FT

## Explanation of marking

Marking	Description
2C-1.2 (EN 170:2002)	UV protection with good colour recognition. This product conforms to the requirements of the standard, providing UV protection for the complete specified range (210nm – 365nm)
5-1.7, 5-2.5 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)
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
K	Resistance to surface damage by fine particles
N	Resistance to fogging

## Important notice

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

For more information on 3M products and services please contact 3M.

### Personal Safety Division

3M United Kingdom PLC  
3M Centre, Cain Road  
Bracknell, Berkshire RG12 8HT  
t: 0870 60 800 60  
www.3M.eu/Safety

3M Ireland Limited  
The Iveagh Building  
Carrickmines Park  
Carrickmines  
Dublin 18  
t: 1800 320 500

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