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Technical Datasheet

March 2025

3M™ GoggleGear™ Protective Goggle 3000 Series

Product Description

GG3001-AF

GG3101-SGAF

GG3201-AAF

GG3301-SGAF

3M™ GoggleGear™ Protective Goggle 3000 Series features a full-size design with wrap-around lens for improved field of vision, and slotted nose bridge for a more comfortable fit. Features optimized shroud design to accommodate many prescription eyewear.

The 3M™ GoggleGear™ Protective Goggle 3000 Series is a range of safety goggles designed to protect the eyes of a wearer against one or more common occupational hazards such as impacts from flying particles, optical radiation, dusts and/or splashing liquids.

The 3M™ GoggleGear™ Protective Goggle 3000 Series are CE certified to EN ISO 16321-1: 2022, standard for eye and face protection for occupational use.

Different models of the 3M™ GoggleGear™ Protective Goggle 3000 Series are available allowing to meet the specific needs of your application.

Key Features

- Large profile protective goggle with wraparound lens fitting over many prescription eyewear
- Soft, flexible shroud with slotted nose bridge design conforms to the face for added comfort
- Indirect venting to help reduce fogging
- Cloth or neoprene strap
- Adjustable strap to provide a comfortable and secure fit
- GG3201-AAF is free of natural rubber latex
- Dielectric, no metal parts
- Models with neoprene straps can be disinfected, when necessary[1]
- Enhanced Optical Performance lens, (marking 1) allowing for prolonged use
- Protection against droplets– meeting code 3
- Protection against large dust particles – meeting code 4
- Resistance to streams of liquids – meeting code 6
- Protection against chemical resistance – meeting code CH (GG3001-AF and GG3201-AAF only)
- Protection against UV protective filters – meeting code U
- Optional 3M™ Scotchgard™ Anti-Fog Protector Coating (SGAF) models resist fog 11x longer and has 7x better anti-scratch performance than traditional 3M™ Anti-Fog Coating, meeting K & N requirements.
- Optional 3M™ Scotchgard™ Anti-Fog Protector Coating performance lasts longer than traditional 3M anti-fog coatings after multiple washings with water.

[1] EN ISO 16321-1:2022 testing not conducted after internal disinfection testing. See Eye Protection for Infection Control_TechnicalBulletin.pdf (3m.com) for complete details

Typical Applications

These products may be suitable for use in a wide variety of applications including, but not limited to industrial manufacturing, metal working, mining/oil and gas, construction, food industry, pharmaceutical, and general laboratory.

Storage and Cleaning

Eyewear should be cleaned using soap and water or 3M™ Lens Cleaning Solution. Pat dry with a soft cloth or tissue. For disinfection instructions please contact 3M.

Store in original packaging and keep away from abrasives, solvents or solvent vapours.

Maximum Relative Humidity **<90%**

Temperature Range **-5°C to +45°C**

Product Specifications and Material List

- Weight: 95 g – 105 g (depends on model)
- Goggle width: 175 mm
- Goggle height: 80 mm

Lens material: Polycarbonate OR Acetate

Shroud material: PVC (polyvinyl chloride) OR TPV (thermoplastic vulcanizates)

Strap end pieces material: Nylon

Strap buckle material: Polyoxymethylene

Strap material (cloth): Polyester

Strap material (neoprene): Neoprene

Table 1: Model Details

Product Code	Lens Material	Coating	Lens Color	Ventilation	Shroud Material	Strap Material	Lens Marking	Frame Marking
GG3001-AF	Polycarbonate	Anti-fog	Clear	Indirect	Translucent PVC	Black cloth	3M UL1,2 DT HM 1 CH	16321 3M U1,2 DT HM 3 6 4 CH
GG3101-SGAF	Polycarbonate	SGAF	Clear	Indirect	Translucent PVC	Black cloth	3M UL1,2 DT HM 1 K N	16321 3M U1,2 DT HM 3 6 4 CH
GG3201-AAF	Acetate	Anti-fog	Clear	Indirect	Translucent PVC	Black neoprene	3M UL1,2 CT 1 N CH	16321 3M U1,2 CT 3 6 4 CH
GG3301-SGAF	Polycarbonate	SGAF	Clear	Indirect	Black TPV	Black cloth	3M UL1,2 DT HM 1 KN	16321 3M U1,2 DT HM 3 6 4 CH

Explanation of Marking

Table 2: Explanation of Marking

Marking	Description
UL1,2	Ultraviolet filter, detection of Signal Lights This product conforms to the requirements of the standard, providing UV protection per Table 5 of EN ISO 16321-1: 2022 Luminous Transmittance; 100% > $\tau_{v,A}$ ≥ 74,4%
1	Enhanced Optical Performance
CT	High Speed Impact resistance level C (45 m/s) at extremes of temperature
DT	High Speed Impact resistance level D (80 m/s) at extremes of temperature
HM	High mass impact resistance
CH	Chemical resistance There is a minimum list of chemicals that a protector must be tested*
K	Resistance to surface damage by fine particles
N	Resistance to fogging
3	Protection against droplets
4	Protection against large dust particles
6	Protection against streams of liquid

**See Testing Protectors: Minimum List of Chemicals table*

Table 3: Testing Protectors: Minimum List of Chemicals

Chemical	Concentration
Sulfuric acid (purity 96%)	30 ± 2 (aqueous)
Sodium hydroxide (purity 99%)	10 ± 1 (aqueous)
p-xylene (purity 99%)	Undluted
Butan-1-ol (purity 99%)	Undiluted
n-heptane (purity 99%)	Undiluted

Use Limitations

- Never modify or alter this product
- Do not use this product against hazards other than those specified in this document
- Always read and follow the user instruction prior to use.

Standards and Approval

All versions meet the requirement of EN ISO 16321-1:2022

These products are type examined by Certottica SCRL, (Notified body number 2008).

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.

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.

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