



Technical Datasheet

3M™ 2800 Series Safety Goggles

Product Description:

3M™ 2890 (Indirectly ventilated, featuring polycarbonate lens)

3M™ 2890 A (Indirectly ventilated, featuring acetate lens)

3M™ 2890 S (Sealed, featuring polycarbonate lens)

3M™ 2890 SA (Sealed, featuring acetate lens)

Main Features

The 3M™ 2800 Series Safety Goggles include two indirectly ventilated (2890 & 2890A) and two sealed versions (2890S & 2890SA). All four models feature a clear lens for protection against UV light, and are suited to a variety of fields of use (see table below).

Note: These products contain components which contain natural rubber latex which may cause allergic reaction.

PRODUCT		3M 2890	3M 2890A	3M 2890S	3M 2890SA
Protection against impact energy	Low energy (N) @ 45m/s (F)	•	•	•	•
	Medium energy @ 120m/s (B)	•	N/A	•	N/A
Protection against liquid droplets (3)		•	•	•	•
Protection against large dust particles (4)		•	•	•	•
Gases & fine particles (5)		N/A	N/A	•	•
Protection against molten metal (9)		•	N/A	•	N/A
Resistance to surface damage by fine particles (K)		•	N/A	•	N/A
Anti-fog protection Low energy (N)		•	•	•	•

Key Features:

- Strong optical class 1 lens with anti-fog and anti-scratch coating for improved vision and extended wear time
- Modern slim design for excellent fit over the face
- Wide, easy-to-adjust strap for stable comfortable wear
- Pivoting ratchet for convenient individual adjustment and fit
- Indirect ventilation improves air circulation and reduce fogging in hot/humid conditions (2890/2890A)
- Additional protection against gas & fine particles (2890S/2890SA)
- Acetate lens option for increased chemical resistance
- Lightweight (99 g) for increased comfort and wearability
- Compatible with 3M respiratory protection
- Replacement lens options

Approvals:

These safety goggles have been shown to meet the basic safety requirements under Article 10 of the European Community Directive 89/686/EEC and are 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, UK (0194). (Notified Body number 0194).

Standards:

These products are intended for protection against a variety of hazards including liquid droplets (3), large dust particles (4), gas & fine particles (5), molten metal & hot solids (9), low energy impact (F) and medium energy impact (B) at extremes of temperature -5°C and +55°C (T) in accordance with EN166:2001. In addition, these products also protect against UV radiation in accordance with EN170:2002.

Applications

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

- Grinding
- Assembling
- Paint Spraying
- Metal work (cold & hot)
- Chemical handling
- Pharmaceutical

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:	2C-1.2 (as per EN170:2002)
Manufacturer's identification:	3M
Optical Class:	1
Symbol for mechanical strength:	B (medium energy)

Example of frame marking:-

Manufacturer's identification:	3M
Product reference:	2890
European Standard:	EN166
Field of use (where applicable):	3 (liquid droplets)
	4 (large dust particles)
	5 (gas & fine particles)
	9 (hot solids & molten metal)
	BT (high speed impact at medium energy at extreme temperature)

Explanation of filter code and scale numbers:

Please see the table below for further information.

PRODUCT	Lens Option	Lens Marking	Explanation	Comments
3M 2890	Clear	2C-1.2	2C: UV Filter code. 1.2: Scale number.	Colour recognition not affected. 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
3M 2890A	Clear	2C-1.2		
3M 2890S	Clear	2C-1.2		
3M 2890SA	Clear	2C-1.2		

Materials Listing:

Lens	<u>Polycarbonate (2890/2890S):</u> <u>Acetate (2890A/2890SA)</u>
Frame:	<u>PVC</u>
Ratchet:	<u>Nylon</u>
Head strap:	Polyester jacquard tape, contains natural rubber latex

Use Limitations

- Never modify or alter this product
- Do not use this product against hazards other than those specified in this document
- Always ensure that the correct replacement lens is used

Replacement Parts & Accessories:

- 3M 289: Replacement lens for 2890/2890S
- 3M 289A: Replacement lens for 2890A/2890SA
- 3M 270: Anti-fog wipe
- 3M 274: Soft carry bag
- 3M 275: Soft carry bag with belt/shoulder strap

3M Product	2890	2890A	2890S	2890SA
Lens Shade	Clear	Clear	Clear	Clear
% UV Light absorption (180nm-380nm)	100	100	100	100
% Visible Light transmission (380nm-780nm)	86	89	86	89
% Infra Red light absorption (780nm-1100nm)	8	8	8	8

Note: Average values



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