# Technical Datasheet



# 3M™ 2890 Series Goggles included:

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)

3M™ 2895 S (Sealed, featuring polycarbonate lens)

#### **Product Description:**

The 3M™ 2890 Series Goggles include two indirectly ventilated (2890 & 2890A) and three sealed versions (2890S, 2890SA & 2895S). All except 2895S feature a clear lens which offers protection against UV light. The 2895S features a shade 5 lens for gas welding and cutting.

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

#### **Intended Use:**

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.

NOTE: The 2895S lenses are assessed against EN169:2002 for transmittance requirement for welding filters. This product protects against high speed impact at medium energy at room temperature only.

Please see the table below for further information.

Product	Protection against impact energy		Protection against liquid droplets (3)	Protection against large dust particles (4)	Gases & fine particles (5)	Protection against molten metal (9)	Resistance to surface damage by fine particles (k)	Anti-fog protection (N)
	Low energy @ 45m/s (F)	Medium energy @ 120m/s (B)						
3М™ 2890	✓	✓	<b>√</b>	✓	NA	<b>√</b>	✓	✓
3M™ 2890A	<b>√</b>	NA	✓	✓	NA	NA	NA	✓
3M™ 2890S	✓	✓	✓	✓	✓	<b>√</b>	✓	✓
3M™ 2890SA	1	NA	1	✓	✓	NA	NA	✓
3M™ 2895S	1	1	✓	<b>√</b>	<b>√</b>	1	<b>√</b>	1





#### **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 fit
- · Pivoting ratchet for convenient individual adjustment and fit
- Indirect ventilation improves air circulation and reduces fogging in hot/humid conditions (2890/2890A)
- Additional protection against gas & fine particles (2890S/2890SA/2895S)
- Acetate lens option for increased chemical resistance
- · Lightweight (99g) for increased comfort and wearability
- Works well with 3M respiratory protection
- · Replacement lens options

#### **Applications**

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

- Construction
- Pharmaceutical
- General laboratory
- · Electronic component manufacture
- · General assembly
- Industrial manufacturing
- DIY

## **Standards and Approval:**

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).

These products are tested and CE approved against EN166:2001, EN170:2002 and EN169:2002.

#### 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)

#### **Product Range**



3M™ 2895S Goggle



3M™ 2890 Goggles





## **Explanation of filter code and scale numbers:**

Please see the table below for further information.

Product	Lens Option	Lens Marking	Explanation	Comments
2890, 2890A, 2890S, 2890SA	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 (210nm - 280nm) bands
2895S	Welding	5	5: Welding shade	Intended for use against gas welding and braze welding

## **Materials Listing:**

Polycarbonate (2890/2890S/2895S); Acetate Lens:

(2890A/2890SA)

Frame: Ratchet: Nylon

Head strap: Polyester jacquard tape, contains natural rubber

latex

#### **Use limitation**

- 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:

3M™ 289: Replacement lens for 2890/2890S 3M™ 289A: Replacement lens for 2890A/2890SA

### Light transmission and absorption data

3M™ Product	Lens Shade	% UV Light absorption (210nm – 313nm)	% UV Light absorption (313nm – 365nm)	% UV Light absorption (365nm – 405nm)	% Visible light transmission (500nm – 650nm)
2890, 2890A, 2890S, 2890SA	Clear	99.99	99.99	83.28 95.70 86.00 95.46	86.08 82.46 89.11 85.86

3M™ Product	Lens Shade	% UV Light Absorption (210nm – 313nm)	% UV Light Absorption (313nm – 365nm)	% UV Light Absorption (365nm –380nm)	% Light Absorption (380nm –480nm)	% Visible Light Transmittance (500nm – 650nm)	% IR Light Absorption (780nm – 1400nm)
2895S	Welding	99.99	99.99	99.99	99.99	0.66	98.52

#### 3M Health & Safety Helpline

0870 60 800 60 (UK) 1 800 320 500 (Ireland)

#### **3M Safety Solutions**

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www.3M.co.uk/ohes

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