

## BIOCLEAN™ GOGGLE MARKINGS EXPLANATION SHEET

Personal Protective Equipment (PPE) shall mean any device or appliance designed to be worn or held by an individual for protection against one or more health and safety hazards, as well as any accessory or ensemble designed to protect an individual.

BioClean™ goggles all fall under PPE category II. This category includes medium-risk PPE, such as safety spectacles and goggles, high-visibility clothing, bump caps and industrial helmets. The conformity procedure required involves notified body assessment.



### **BioClean™ Clearview Autoclavable Goggles (BCAG)**

BioClean™ Clearview Autoclavable Cleanroom Goggles have a super-soft thermoplastic rubber frame with upper vents and an indirect lower ventilation system to provide wearer comfort and reduce the risk of contamination entering the controlled environment. These goggles feature a toughened anti-fog and anti-scratch optically clear polycarbonate lens for clear vision.



### **BioClean™ Clearview Autoclavable Panoramic Goggles (BCAP)**

BioClean™ Clearview Autoclavable Panoramic Goggles have a super-soft thermoplastic rubber frame featuring an indirect ventilation system to provide comfort and reduce the risk of contamination entering the controlled environment. With extra depth and width for increased field of vision they are ideal for wearing over large eye-glasses, and feature a toughened anti-fog and anti-scratch optically correct polycarbonate lens for clear vision.



### **BioClean™ Clearview Sterile Single Use Goggles (BCGS1)**

BioClean™ Clearview Sterile Single Use Goggles are constructed from lightweight ultra-soft PVC, and have an indirect ventilation system to maintain user comfort and reduce the risk of contamination entering the controlled environment. With PPE Cat 2 certification they provide personal protection and can be worn over eye-glasses with ease and feature an optically correct toughened polycarbonate lens with anti-fog and anti-scratch coating for clear vision.

The standard EN166 recalls some of the other regulations that help define the requirements that the PPE must meet:

	REQUIRED MARKINGS	MARKINGS ON FRAME	EXPLANATION
<b>BioClean™ Clearview Autoclavable Goggles (BCAG) frame markings</b>	Manufacturer's Identification Mark	BioClean™	BioClean™
	Standard Number	EN166	European Standard on Personal Eye Protection
	Field of Use	BT	Medium energy impact at extremes of temperature
	Optical Class	1	High optical quality
	Conformity Mark	CE	Conformity with European Standards

	REQUIRED MARKINGS	MARKINGS ON FRAME	EXPLANATION
<b>BioClean™ Clearview Autoclavable Panoramic Goggles (BCAP) frame markings</b>	Manufacturer's Identification Mark	BioClean™	BioClean™
	Standard Number	EN166	European Standard on Personal Eye Protection
	Field of Use	BT	Medium energy impact at extremes of temperature
	Optical Class	1	High optical quality
	Conformity Mark	CE	Conformity with European Standards

	REQUIRED MARKINGS	MARKINGS ON FRAME	EXPLANATION
<b>BioClean™ Clearview Sterile Single Use Goggles (BCGS1) frame markings</b>	Manufacturer's Identification Mark	Ansell	Ansell
	Brand	BioClean™	BioClean™
	Standard Number	EN166	European Standard on Personal Eye Protection
	Field of Use	3	Liquids (droplets or splashes)
	Field of Use	4	Large dust particles (Dust with a particle size > 5 µm)
	Field of Use	B	Medium energy impact
	Conformity Mark	CE	Conformity with European Standards
	Standard Number	(ANSI) Z87.1	American National Standard for Occupational and Educational Personal Eye and Face Protection Devices. Protection against flying fragments, objects, large chips, particles, sand, dirt etc.
	Field of Use	Z87+	High impact rating
	Field of Use	D3	Splash and Droplet
	Field of Use	D4	Dust
	Conformity Mark	CA42500	Brazilian certification number

	REQUIRED MARKINGS	MARKINGS ON OCULAR	EXPLANATION
<b>BioClean™ Clearview Sterile Single Use Goggles (BCGS1) ocular markings</b>	Manufacturer's Identification Mark	BioClean™	BioClean™
	Standard Number	2C-1.2	Full compliance to European Standard EN 166
	Optical Class	1	High optical quality
	Mechanical Strength	B	Medium energy impact
	Original or Replacement Ocular	O	Original Ocular
	Standard Number	(ANSI) Z87.1	American National Standard for Occupational and Educational Personal Eye and Face Protection Devices. Protection against flying fragments, objects, large chips, particles, sand, dirt etc.
	UV Filter Transmittance	U6	Max Effective Far UV= .01% / Max Near UV= .1% (block out 99.9% of UV light)

## MEANINGS OF THE EN MARKING

PPE of categories II and III shall be tested and certified by an official Notified Body.

The product certification which confirms the compliance to the requirements included in the PPE Regulation (EU) 2016/425 is based on the following European standards:

**EN166** – Personal eye-protection specifications

EN166 recalls additional standards which specifies the requirements as a function of PPE typology and field of use:

**EN165** – Vocabulary

**EN171** – Infra-red (IR) ray filters

**EN167** – Optical test methods

**EN172** – Sunglare filters for industrial use

**EN168** – Non-optical test methods

**EN1731** – Mesh eye and face protectors

**EN169** – Filter for welding and related techniques

**EN 379** – Specification for automatic welding filters

**EN170** – Ultra-violet (UV) ray filters

### OPTICAL CLASS

Optical Class	Spherical refractive power m <sup>-1</sup>	Astigmatic refractive power m <sup>-1</sup>	Difference in prismatic refractive power		
			horizontal base out	horizontal base in	vertical
1	± 0.06	0.06	0.75	0.25	0.25
2	± 0.12	0.12	1	0.25	0.25
3	+0.12 / -0.25	0.25	1	0.25	0.25

### PROTECTION AGAINST HIGH SPEED PARTICLES

Mechanical resistance	Impact level	Maximum speed	Diameter	Grams	Ocular material	BCAG	BCAP	BCGS1
<b>A (T)</b>	High energy impact	190 m/s   684 km/h	Ø 6 mm	0,86 gr	Polycarbonate			•
<b>B (T)</b>	Medium energy impact	120 m/s   432 km/h			Polycarbonate	•	•	•
<b>F (T)</b>	Low energy impact	45 m/s   162 km/h			Polycarbonate, acetate			
<b>S</b>	Increased robustness	5,1 m/s   18,36 km/h	Ø 22 mm	43 gr	CR39, Toughened glass			

If impact letter A, B or F is followed by the letter T, then the frame protects against impact at extreme temperatures (-5 / + 55 °C)

### OPTIONAL REQUIREMENTS

<b>K</b>	Resistance to surface damage by fine particles
<b>N</b>	Resistance to fogging of oculars
<b>T</b>	Protection against high speed particles at extreme temperatures
<b>H</b>	Frame suitable for small head
<b>R</b>	Enhanced reflectance

### FIELD OF USE

Symbol	Designation	Description of the field of use	BCAG	BCAP	BCGS1
<b>No symbol</b>	Basic use	Unspecified mechanical hazards and hazards arising from ultraviolet, visible, infra-red and solar radiation	•	•	•
<b>3</b>	Liquids	Liquids (droplets or splashes)	•	•	•
<b>4</b>	Large dust particles	Dust with a particle size > 5 µm	•	•	•
<b>5</b>	Gas and fine dust particles	Gases, vapours, sprays, smoke and dust with a particle size < 5 µm			
<b>8</b>	Short circuit electric arc	Electrical arc due to a short circuit in electrical equipment			
<b>9</b>	Molten metals and hot solids	Splashes of molten metal and penetration of hot solids			