

**PRODUCT: SAFETY SPECTACLES**  
**REF. NO.: ES 001 (CLEAR & SMOKED)**



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CONFORMING TO EN 166: 2002, & ANSI Z87.1-2010

<b>1</b>	<b>GENERAL PARAMETERS</b>	TYPE	Spectacles
		DESIGN	Frameless, Wraparound Spectacle
		APPLICATION	All Industrial Settings where Dust/Flying Particles Protection or Ultraviolet Protection is required
		LENS COLOUR OPTIONS	Clear, Smoked
		MECHANICAL HAZARD PROTECTION	Frontal, Lateral Impact Resistance Lateral Protection
		OPTICAL HAZARD PROTECTION	99.9% UV Protection
		MATERIALS	Lens – Polycarbonate Temples – Polycarbonate
		OPTICAL CLASS	Class 1
		LENS SCALE FOR CLEAR LENS	3-1.2
		LENS SCALE FOR SMOKED LENS	5-2.5
		COATINGS	Hard Coated for Scratch Resistant, Antifog
WEIGHT	< 26 gms		

2	VITAL TEST COMPLIANCE	MECHANICAL HAZARD PROTECTION	<b>Resistance to Low Impact Energy of High Speed Particles at Extremes of Temperature:</b> Withstands the impact of a 6mm nominal diameter steel ball, weighing 0.86 gm at a speed of 45 m/s. The impacts are carried out after conditioning the eyewear to temperatures of $(55 \pm 2) ^\circ\text{C}$ and $(-5 \pm 2) ^\circ\text{C}$
		INCREASED ROBUSTNESS	Also withstands the impact of 22 mm nominal diameter, weighing 44gm. When dropped from a height of 1.27 – 1.31 mtrs.
		OPTICAL HAZARD PROTECTION	99.9% UV Protection Transmittance (280-380 nm) < 0.1%
	OPTICAL PROPERTIES		Spherical Refractive Power of Clear Lens within $\pm 0.06 \text{ m}^{-1}$
			Astigmatic Refractive Power of Clear Lens $\pm 0.06 \text{ m}^{-1}$
			Prismatic Refractive Power for Clear & Smoked Lens- Horizontal base out $\leq 0.75 \text{ cm/m}$ ; Base in $\leq 0.25 \text{ cm/m}$ ; Vertical $\leq 0.25 \text{ cm/m}$
			Max spectral transmittance in UV-313nm of Clear Lens- 0.0003%
			Max spectral transmittance in UV-365nm of Clear Lens- 10%
			Max spectral transmittance in UV range : 280-315nm of Smoked Lens- 0.1%
			Luminous transmittance in visible spectra of Clear Lens- 74.4-100% & for Smoked Lens- 29.1-43.2%
	CORROSION RESISTANCE	No Corrosion observed on metal parts of Spectacle when tested as per CE & ANSI Standards	
	FLAME RESISTANCE	Spectacle did not ignite when tested as per CE & ANSI Standards.	