

3/7/2014

Sabastian Barriga Vicsa Safety Casa Matriz Pintor Cicarelli 683-San Joaquin, Chile

Intertek Test Report Number:

G101529224CRT-001

Dear Sabastian:

Intertek has completed the evaluation of your eyewear model Turbine Claro AF, manufactured by Vicsa Safety to the Rating of Z87+. The eyewear was evaluated to the requirements of <u>American National</u> <u>Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI/ISEA</u> <u>Z87.1-2010</u>. The test samples were received on 2/12/14 in new condition. The evaluations were performed at Intertek in Cortland, NY on 2/14/14 through 2/28/14. The results of these tests are as indicated below.

 Sample(s) provided for Evaluation:
 Turbine Claro AF

 Tests Completed:
 Test Date(s):
 Section

 General Requirements (All Protectors)
 2/28/14
 5
 PASS

Impact Protector Requirements
(Z87+)2/14/146PASSDroplet and Splash, Dust, and Fine
Dust Protector Requirements2/28/148PASS

NOTE: See Pages 3-8 for the representative data sheets for the product evaluated.

This test report concludes the work for your project outlined under Intertek Quote No: 500498525. If there are any questions

regarding this report please contact the undersigned at 607-753-6711.

Tested by:

HINTERTER Hinnock Horsen

andrews R. Sigmon

Andrew Rulison Technician 1 Performance Group

Reviewed by:

Chad Morey Engineer Performance Group

An independent organization testing for safety, performance, and certification.

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Client:	Vicsa Safety	Engineer:	Chad Morey		
Job No.:	G101529224	Tested By:	Andrew Rulison	Date:	3/7/14
Product:	Spectacle	Reviewed By	/:Chad Morey	Date:	3/7/14
Model No.:	Turbine Claro AF	Standard:	ANSI/ISEA Z87.1-2010		

Sample Control Number:

CRT1402071156-001

TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goggle: X	Faceshield:	WH Lenses:	FF Respirator:	Removable:
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non- Removable:

Table of Contents:						
Required:	Page(s):	Section:	Test Description:			
(X)	8	N/A	Intertek Report No: G101529224CRT-001			
(X)	1	N/A	Table of Contents			
(X)	1	N/A	Equipment List			

Equipment List:							
Used:	Equipment:	Manufacturer:	Model No.:	Control No.:	Cal. Due Date:		
х	Headform	Inspec	EN 168:2001 Medium Head (50 th percentile adult male)	N/A	N/A		
х	Gram Scale	Ohaus	Adventurer	S253	1/24/15		
Х	Calipers	Mitu	0-6"	N895	4/30/14		
Х	Tape Measure	Lufkin	233ME	R179	4/17/14		
Х	Thermocouple / Meter / Rod	Omega	ОМ	T-288053	8/28/14		
Х	Stopwatch	FS	14-649-55	N1363	4/3/14		
Х	High Mass Impactor (pointed projectile)	Intertek	Z87-2010 High Mass	J143	3/13/14		
Х	Air Cannon	Basic Eng	HVIT	N740	8/27/14		
Х	Needle Penetrator	Intertek	Z87-2010 Penetrator	J148	CAT3		
Х	Drop Ball	Intertek	Z87-2010 Drop Ball	J147	3/1/14		
Х	Hazemeter	Gardner	XL211	N328	Per Use		
Х	100 ft Goniometer	NA	NA	N060	Nov-2014		
Х	8x Telescope	NA	NA	NA	Per Use		
Х	Std. Diopter Set	NA	NA	NA	NA		

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Model No.:	Turbine Claro AF	Standard:	ANSI/ISEA Z87.1-2010	_	

Sample Control Number:

TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goaale: X	Faceshield:	WH	FF	Removable:
71				Lenses:	Respirator:	
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non-
						Removable:

Section 5, General Requirements (All Protectors)

Section	Requirement	Results	Compliance
(Test)			
5	General Requirements (All Protectors)		
5.1.1 (9.1)	Optical Quality: Lenses shall be free of striae, bubbles, waves and other visible defects which would impair their optical quality	Sample #:1Defects:NO	PASS
5.1.2 (9.2)	Luminous Transmission: Clear lenses shall have a luminous transmission of not less than 85%.	Laboratory Conditions:Req'd:Temperature Range 18-28 °C (65-82 °F)Humidity Range 35-65 %Actual:25°18%Sample #:1Percent Transmittance LeftRight 92.392.392.8	PASS
5.1.3 (9.3)	Haze: Clear plano lenses shall not exhibit more than 3% haze.	Laboratory Conditions:Req'd:Temperature Range 18-28 °C (65-82 °F)Humidity Range 35-65 %Actual:25°18%Sample #:1 Percent Haze LeftRight 0.380.380.27	PASS

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TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goggle: X	Faceshield:	WH Lenses:	FF Respirator:	Removable:
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non- Removable:

Section (Test)	Requirement			Results	Compliance	
5	General Requirer	nents (All Pr	otectors)			
5 5.1.4 (9.4, 9.5)	.4 Refractive Power, Astigmatism, Resolving 9.5) Power, Prism and Prism Imbalance for Plano Protectors: The tolerance on refractive power, astigmatism and resolving power shall be as indicated in Table 1. The tolerance on Prism and Prism Imbalance shall be as indicated in Table 2. Prism Imbalance* Left Right 0.16 0.09 * for calculation only		Laboratory Cd Req'd: Tempera Range 18 °C (65-82 Actual: 68° Test 68° Refractive Power (D) Astigmatism (D) Resolving Power (>20 Pris Left Vertical 1 1 Prism Im Vertical -0.063 0	onditions: ture Humidity 3-28 Range 35-65 % 48% Left Right -0.5 -0.5 0.02 0.01) 24 24 m Right Vertical Horizontal 0.5 -1 balance Horizontal 0.000		
	Table 4: Ta		free the Deve	A - Competing and Da	h du a Davia	
	Table 1: To	lerance on R	efractive Power	r, Astigmatism and Re	solving Power	PASS
	Spectacle	Ren			Pattern 20	
	Goggle		± 0.06 D	≤ 0.06 D ≤ 0.06 D	Pattern 20	
	Faceshield Wind	lows No	Requirement	No Requirement	Pattern 20	
	Welding Helm Lenses	et	± 0.06 D	≤ 0.06 D	Pattern 20	
		Table 0: Ta	lavon og og Dela	m and Driam Imhalana		
		Table 2: To	Vertical	m and Prism Impalanc	e Base Out	
	Protector	Prism	Imbalance	Base In Imbalance	Imbalance	
	Spectacle	≤ 0.50 ∆	≤ 0.25 ∆	≤ 0.25 ∆	≤ 0.50 ∆	
	Goggle	≤ 0.25 ∆	≤ 0.125 ∆	≤ 0.125 ∆	≤ 0.50 ∆	
	Faceshields Wolding Lonson	$\leq 0.37 \Delta$	$\leq 0.37 \Delta$	≤ 0.125 ∆	≤ 0.75 ∆ ≤ 0.75 ∧	
	WEIGHING LEIISES	⊇ 0.00 ∆	Ξ 0.20 Δ	Ξ 0.20 Δ	Ξ0.75Δ	

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TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goggle: X	Faceshield:	WH Lenses:	FF Respirator:	Removable:
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non- Removable:

Section (Test)	Requirement	Results	Compliance
5	General Requirements (All Protectors)		
5.2.1 (9.6)	Drop Ball Impact Resistance: The protector lenses shall not fracture when impacted by a steel ball. A complete device shall fail if any of the following occurs; piece fully detached from inner surface, fracture, penetration of the rear surface, or lens not retained	Laboratory Conditions:Req'd:Temperature Range 18-28 °C (65-82 °F)Humidity Range 35-65 %Actual:69°41%Sample 9.6:Impact eye LocationFracture, penetration, etc(1)LeftNO(2)LeftNO(3)RightNO(4)RightNO	PASS
5.2.3 (9.7)	Ignition: Protectors shall not ignite or continue to glow once the rod is removed. Each externally exposed material (exclusive of textiles or elastic bands) shall be tested.	Laboratory Conditions:Req'd:TemperatureHumidityRange 18-28Range°C (65-82 °F)35-65 %Actual:70°55%TypeIgnitionAfterglowLensNoNoFrameNoNoTempleNoNo	PASS
5.2.4 (9.8)	Corrosion Resistance: Metal components used in protectors shall be corrosion resistant to the degree that the function of the protector shall not be impaired by the corrosion. Lenses and electrical components are excluded from these requirements.	Laboratory Conditions: Req'd: Temperature Range 18-28 Humidity Range 35-65 % Actual: 70° 62% Sample #: Metal Function Impaired Components Screws NO	PASS

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Model No.:	Turbine Claro AF	Standard:	ANSI/ISEA Z87.1-2010			

Sample Control Number:

CRT1402071156-001

TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goggle: X	Faceshield:	WH Lenses:	FF Respirator:	Removable:
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non- Removable:

Section 6, Impact Protector Requirements (Z87+)

Section	Requirement	Results	Compliance
(Test)			
6	Impact Protector Requirements (Z87+)		1
6.1.3 (9.10)	Lateral (side) Coverage: Impact rated protectors shall provide continuous lateral coverage (i.e. no openings greater than 1.5 mm (.06 in.) in diameter) from the edge of the lens to a point not less than 10 mm (0.394 in.) posterior to the corneal plane and not less than 10 mm (0.394 in.) above and not less than 10 mm (0.394 in.) below the horizontal plane centered on the eyes of the headform.	Sample #:LocationCoverage0° Right (random)YES90° Right 10mmYES90° Left 10mm aboveYES0° Left (random)YES10mm belowYES90° Right 10mmYES90° Left 10mm belowYES90° Left 10mm belowYES	PASS
6.2.2 (9.11)	High Mass Impact: The complete device shall be capable of resisting an impact from a pointed projectile. A complete device shall fail if any of the following occurs; piece fully detached from inner surface, fracture, penetration of the rear surface, lens not retained.	Laboratory Conditions:Req'd:Temperature Range 18-28 °C (65-82 °F)Humidit y Range 35-65 %Actual:69°41%Sample 9.11:Impact eye LocationFracture, penetration, etc(1)LeftNO(2)LeftNO(3)RightNO(4)RightNO	PASS

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Sample Control Number:

CRT1402071156-001

TRANSCRIBED TEST DATA

Type:	Spectacle: X	Goggle: X	Faceshield:	WH	FF	Removable:
				Lenses:	Respirator:	
Style:	Plano:	Rx:	Photochromatic:	Tinted:	Clear:	Non-
						Removable:

6.2.3	High Velocity Impact:						
(9.12)				Laboratorv	Conditions	:	
	The complete device shall be capable of resisting		Req	'd: Tempe	rature	Humidit	
	impact from a 6.35 mm (0.25 in) diameter steel ball			Range	18-28 y	Range	
	traveling at the velocity specified in Table 5 (see			°C (65-	82 °F) 3	35-65 %	
	Appendix A). No contact with the eye of the headform		Actu	ial: 69)°	40%	
	is permitted as a result of the impact.	_					
	A complete device shall fail if any of the following		Samp	ole 9.12			
	occurs; piece fully detached from inner surface,		#:				
	fracture, penetration of the rear surface, lens not		n		1		
	retained. For the high-velocity test, the unaided eye		#	Impact	Impact	Contact	
	observes any piece adhering to the contact paste, or			Location	Velocity	w/ eye	
	observes contact paste on the projectile or complete				(ft/s)	5	
	device.						
			(1	0° Rt. Eye	255.0	NO	
	**Complete APPENDIX A prior to testing **)				
			(2	30° Rt.		NO	
)	Eye	252.6	NO	
	Steel Ball		(3	*90° Rt.	054 7	NO	
	Diamotor mm 6.25 6.22)	Eye	251.7	NO	
	Weight grams 1.06 1.05			(above)			
	Weight, granie 1.00 1.00		(4	0° Lt. Eye	252.6	NO	PASS
)	_	203.0		17,00
			(5	00014			
			(5	30° Lt.	252.6	NO	
)	Lye			
			(6	*90° Lt.			
)	Eye	252.3	NO	
				(below)			
		**	10 mn	n above or be	elow the pl	ane of the	
		e	yes.				
L	1	-					I

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Style:	Plano:		Rx:		Photochromatic:	Tinted:	Clear:	Non- Removable:

6.2.4 (9.13)	Penetration Test (lenses only): Lenses for all complete devises shall be capable of resisting penetration by a weighted needle.		La Req'd: Actual:	aboratory Condit Temperature Range 18-28 °C (65-82 °F) 70°	ions: Humidit y Range 35-65 % 42%	
	A complete device shall fall if any of the following occurs; piece fully detached from inner surface, fracture, penetration of the rear surface, lens not retained.		Sample 9.13:	Impact eye Location	Penetration	PASS
		(1)	Left	NO	
		(2)	Left	NO	
		(3)	Right	NO	
		(4)	Right	NO	

Section 8, Droplet and Splash, Dust, and Fine Dust Protector Requirements

Section	Requirement	Results	Compliance
(Test)			
8	Droplet and Splash, Dust, and Fine Dust Protector Re	quirements	
8.1	Droplet and Splash:		
8.1.1	Goggles:		
(9.16.1)			
. ,	The droplets and/or splash shall not cause a red	Laboratory Conditions:	
	coloration within either of the two circles described	Req'd: Temperature Humidit	
	in the test method. No account shall be taken of any	Range 18-28 y Range	
	such coloration up to a distance of 6 mm (0.24 in.)	°C (65-82 °F) 35-65 %	
	inside the edges of the protector.	Actual: 70° 50%	PASS
			17,00
		Sample #:	
		Red discoloration NO	
		within the circles:	