

September 27, 2012

Vicsa Safety S.A. Casa Matriz Pintor Cicarelli 683-SAN JOAQUÍN SAN **CHILI** 

Intertek Test Report Number: G100789754CRT-100

#### Dear Claudio Martinez Muratsuka:

Intertek has completed the evaluation of your Delta Safety Spectacles with Grey Lenses, manufactured by Vicsa Safety S.A. to the Rating of Z87+. The Safety Spectacles were evaluated to the requirements of American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI/ISEA Z87.1-2010. The test samples were received on 7/12/12 in new condition. The evaluations were performed at Intertek in Cortland, NY on 9/18/12 through 9/26/12. The results of these tests are as indicated below.

Sample(s) provided for Evaluation:		
20 pairs of Safety Spectacles		

<u>Tests Completed:</u>	Test Date(s):	<u>Section</u>	Results
General Requirements (All Protectors)	9/18/12-9/26/12	5	PASS
Impact Protector Requirements (Z87+)	9/18/12-9/26/12	6	PASS
Droplet and Splash, Dust, and Fine Dust		Q	
Protector Requirements	N/A	O	N/A

### NOTE: See Pages 3-7 for the representative data sheets for the product evaluated.

This test report concludes the work for your project outlined under Intertek Quote No: 500386937. If there are any questions regarding this report please contact the undersigned at 607-753-6711.

Tested by: Reviewed by:

Erik Sprague Associate Engineer

Performance Group

San Ensign Sara Ensign

Technician I Performance Group

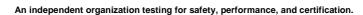












This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Page 2 of 7

Client: Vicsa Safety SA Engineer: Erik Sprague

9/18/12 -

Job No.: G100789754 Tested By: Erik Sprague Date: 9/26/12

Product: Spectacles Reviewed By: Sara Ensign Date: 9/27/12

Model No.: Delta Standard: ANSI/ISEA Z87.1-2010

Description: Safety Spectacles with grey lenses

Sample Control Number: 2012-07-251658 TRANSCRIBED TEST DATA

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

Table of Contents:	able of Contents:								
Required:	Page(s):	Section:	Test Description:	Pass/Fail:					
(X)	1-7	N/A	Intertek Report No: G100789754CRT-100	N/A					
(X)	2	N/A	Table of Contents	N/A					
(X)	2	N/A	Equipment List	N/A					
(X)	3-5	5	General Requirements (all protectors)	PASS					
(X)	5-7	6	Impact Protector Requirements (Z87+)	PASS					

Equipme	nt List:				
Used:	Equipment:	Manufacturer:	Model No.:	Control No.:	Cal. Due Date:
(X)	Headform	Inspec	EN 168:2001 Medium Head (50 <sup>th</sup> percentile adult male)	N/A	N/A
(X)	Headform	Inspec	"H" Head	NA	N/A
(X)	6-inch scales	Fowler	52-389-006	N1273	4/23/13
(X)	Gram Scale	Denver Inst	DI-4K	S132	11/11/12
(X)	Calipers	Mitu	0-6"	N1217	5/30/13
(X)	Tape Measure	Craftsman	939392	N766	11/22/12
(X)	Thermocouple / Meter / Rod	Newport	HHM290/N	M218	12/14/12
(X)	Balance/Scale	Ohaus	Precision Standard	S115	2/17/13
(X)	High Mass Impactor (pointed projectile)	Intertek	Z87-2010 High Mass	J143	12/14/12
(X)	Air Cannon	Basic Eng	HVIT	N740	8/3/13
(X)	Ventilation Probe	Intertek	1.5mm x 125mm	J154	8/3/13
(X)	Needle Penetrator	Intertek	Z87-2010 Penetrator	J174	N/A
(X)	Drop Ball	Intertek	Z87-2010 Drop Ball	J147	2/10/13

Page 3 of 7

Client:	Vicsa Safety SA	Engineer:	Erik Sprague		
Job No.:	G100789754	Tested By:	Erik Sprague	Date:	9/18/12 – 9/26/12
Product:	Spectacles	Reviewed By:	Sara Ensign	Date:	9/27/12
Model No.:	Delta	Standard:	ANSI/ISEA Z87.1-2010		
Description:	Safety Spectacles with grey lenses				
Sample Contr	ol Number: 2012-07-251658		TRANSC	RIRED TES	т рата

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

# **Section 5, General Requirements (All Protectors)**

Section (Test)	Requirement			Results			Compliance
5	General Requirements (A	All Protectors)		•			
5.2	Physical Requirements:  Protectors shall be free from other defects which are like injury during use.			Sample #	Physical Def NO	1 ects	PASS
5.2.1 (9.6)	Drop Ball Impact Resistance The protector lenses shall not a steel ball. A complete development of following occurs; piece full surface, fracture, penetration not retained  Drop Weight, grams Diameter, mm (inch) Drop Height, cm (inch)	ot fracture when ice shall fail if a y detached fron	any of the n inner	Req'd:  Actual:  Sample 9.6: (1) (2) (3) (4)	Laboratory Condi Temperature Range 18-28 °C (65-82 °F) 68°  Impact eye Location Left Left Right Right	Humidity	PASS
5.2.2	Protector Criteria			See section	5.2.1		Info only
5.2.3 (9.7)	Ignition:  Protectors shall not ignite or rod is removed. Each extern (exclusive of textiles or elas	ally exposed m	aterial	Sample #:		tions:	PASS

Client:	Vicsa Safety SA	Engineer:	Erik Sprague		
Job No.:	G100789754	Tested By:	Erik Sprague	Date:	9/18/12 – 9/26/12
Product:	Spectacles	Reviewed By:	Sara Ensign	Date:	9/27/12
Model No.:	Delta	Standard:	ANSI/ISEA Z87.1-2010		
Description:	Safety Spectacles with grey lenses				
Sample Cont	rol Number: 2012-07-251658		TRANSO	RIBED TES	T DATA

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

Section	Requirement	Results	Compliance
(Test)	Kequitement	Results	Comphance
5	General Requirements (All Protectors)		
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.  Date/Time: 9/18/12 – 9/19/12 / 1pm  9/18/12 Brine solution:  9/18/12 Boil for 15 minutes  9/18/12 Immerse in room temp solution  9/18/12- 9/19/12 Dry for 24-hours at room temp  9/19/12 Rinse, air dry, evaluate	Laboratory Conditions:  Req'd: Temperature Humidity Range 18-28 °C Range (65-82 °F) 35-65 %  Actual: 67-73° 56-63%   Sample #: 3 Metal Components Function Impaired Screw 1 NO Screw 2 NO	PASS
5.2.5	Minimum Coverage Area: The eyewire and lens shall cover in plain view an area of not less than 40 mm (1.57 in.) in width and 33 mm 1.30 in.) in height (elliptical) in front of each eye, centered on the geometrical center of the lens. Frames designed for small head sizes shall cover in plain view an area of not less than 34 mm (1.34 in.) in width and 28 mm (1.10 in.) in height (elliptical), centered on the geometrical center of the lens. Frames designed for small head sizes shall be tested on the 54 mm (2.13 in.) PD headform and are permitted to have an eye size, including eyewire thickness, as small as 34 x 28 mm (1.34 x 1.10 in.). Frames that are tested using the small headform shall be marked on the frame with the letter "H".	Sample #: 1  Minimum Coverage  YES	PASS
5.3	Minimum Lens Thickness:  The minimum lens thickness for specified protector shall be those indicated in Table 3.	Sample #: 1 Type: (see table below) 6 Measured Lens Thickness (mm): 1.97	PASS
5.4	Marking Requirements:  All protectors shall bear the permanent markings in specified locations as shown in Table 4a of the standard. Markings shall follow the sequence shown in Table 4b of the standard. Marking for lens type and use applications shall be required only when claims for protection against the hazard or indicated use are made by the manufacturer.  In addition, the components of frames that are intended for prescription protector use shall be marked for size in accordance with the system described in ANSI Z80.5-2004. Fronts shall be marked with the A-dimension (eye size) and DBL.	Sample #: 1  Markings on Sample  VICZ87+U6L2.5S  Meets requirements of Table 4a or 4b: YES	PASS

Page 5 of 7

Client:	Vicsa Safety SA	Engineer:	Erik Sprague		
Job No.:	G100789754	Tested By:	Erik Sprague	Date:	9/18/12 – 9/26/12
Product:	Spectacles	Reviewed By:	Sara Ensign	Date:	9/27/12
Model No.:	Delta	Standard:	ANSI/ISEA Z87.1-2010		
Description:	Safety Spectacles with grey lenses				
Sample Contr	rol Number: 2012-07-251658		TRANSC	RIRED TES	т рата

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

Section (Test)	Requirement		Compliance						
5	General Requirements (All Protectors)								
	Reference Table 4a of standard:								
		Lenses & Repl	acement Lenses		Complete Device				
	Type of Mark	Spectacles	All Other	Frame	(no replaceable parts)				
	All Protectors shall bear the marking	gs below:							
	Mfg Mark or Logo	Yes	Yes	Yes	Yes				
	Standard – Plano		Z87	Z87	Z87				
	Standard – Rx		Z87	Z87-2	Z87-2				
	Coverage (small head)	Н		H					
	The following markings shall be req	uired only when o							
	Impact Mark –Impact rated Plano	+	Z87+	Z87+	Z87+				
	Impact Mark – Impact rated Rx	+	Z87+	Z87-2+	Z87-2+				
	Lens Type – Clear								
	Lens Type - Welding	W shade	W shade		W shade				
	Lens Type – UV Filter	U scale #	U scale #		U scale #				
	Lens Type – Visible Light Filter	L scale #	L scale #		L scale #				
	Lens Type – IR Filter	R scale #	R scale #		R scale #				
	Lens Type – Variable Tint	V	V		V				
	Special Purpose	S	S		S				
	Use- Splash / Droplet			D3	D3				
	Use – Dust			D4	D4				
	Use – Fine Dust			D5	D5				

# **Section 6, Impact Protector Requirements (Z87+)**

Section (Test)	Requirement	Results		Compliance							
6	Impact Protector Requirements (Z87+)										
6.1	General										
6.1.1	Impact Rated Protectors:	Information only									
	Shall meet the impact requirements and be marked per Tables 4a and 4b of the standard.										
6.1.2	Frames and Shells	Tested as a complete device, 6.2.2 and 6.2.3									
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 #:  Location  0° Right (random)  10 mm above  90° Right 10mm above  90° Left 10mm above  0° Left (random)  10mm below  90° Right 10mm below  90° Left 10mm below	1 Coverage YES YES YES YES YES YES YES YES YES	PASS							

Client: Vicsa Safety SA Engineer: Erik Sprague 9/18/12 -G100789754 Job No.: Tested By: Erik Sprague Date: 9/26/12 Product: Spectacles Reviewed By: Sara Ensign Date: 9/27/12 Model No.: Delta Standard: ANSI/ISEA Z87.1-2010 Description: Safety Spectacles with grey lenses

Sample Control Number: 2012-07-251658 TRANSCRIBED TEST DATA

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

Section (Test)	Requirement		Results	3			Compliance
6	Impact Protector Requirements (Z	87+)					
6.2	Impact Requirements	,					
6.2.1	Protector Acceptance Criteria		See sect	ions 6.2.2, 6.2.	3, 6.2.4, 6.2	.6	Info only
6.2.2 (9.11)	High Mass Impact:  The complete device shall be capa impact from a pointed projectile.  A complete device shall fail if any piece fully detached from inner su penetration of the rear surface, len  Impactor- Pointed F	of the following occurs; rface, fracture, s not retained.	Req	PASS			
	Weight, (grams) 500	502	(2)	Left		NO	
		(50") 50"	(3)	Right		NO	
			(4)	Right		NO	
(9.12)	The complete device shall be capa from a 6.35 mm (0.25 in) diameter the velocity specified in Table 5 (scontact with the eye of the headfor result of the impact.  A complete device shall fail if any piece fully detached from inner su penetration of the rear surface, len high-velocity test, the unaided eye adhering to the contact paste, or of the projectile or complete device.  **Complete APPENDIX A p	r steel ball traveling at see Appendix A). No rm is permitted as a of the following occurs; rface, fracture, s not retained. For the observes any piece oserves contact paste on	Req Actu Sampl  # (1) (2)	d: Tempe Range 1 (65-8 al: 68	8-28 °C 2 °F)	PASS	
	Steel Ball		(3)	*90° Rt. Eye (above)	150.4	NO	
	Diameter, mm 6.35	Actual 6.34	(4)	0° Lt. Eye	150.3	NO	
	Weight, grams 1.06	1.01	(5)	30° Lt. Eye	150.3	NO	
			(6)	*90° Lt. Eye (below)	150.4	NO	
			*10 mm	above or belo	w the plane	e of the eyes.	

Page 7 of 7

Client: Vicsa Safety SA Engineer: Erik Sprague 9/18/12 -Job No.: G100789754 Tested By: Erik Sprague Date: 9/26/12 Product: Spectacles Reviewed By: Sara Ensign Date: 9/27/12 Model No.: Delta Standard: ANSI/ISEA Z87.1-2010 Description: Safety Spectacles with grey lenses

Sample Control Number: 2012-07-251658 TRANSCRIBED TEST DATA

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

Section (Test)	Requirement			Results	Compliance		
6	Impact Protector Requirem	ents (Z87+)					
6 6.2.4 (9.13)	Penetration Test (lenses on Lenses for all complete dev resisting penetration by a w A complete device shall fai piece fully detached from i penetration of the rear surfa	ly): vises shall be capabl veighted needle. I if any of the followener surface, fracture	wing occurs;	Req'd:     Req'd:	Laboratory Condi Temperature Range 18-28 °C (65-82 °F) 68°  Impact eye Location Left Left Right Right	Humidity	PASS
6.2.5 (9.14)	Prescription Lens Material	Qualification		Not this type	NA		
6.2.6 (9.11)	Prescription Lens Mounting A complete device shall fair piece fully detached from it penetration of the rear surface.	l if any of the follow nner surface, fractur	Not this type	2		NA	