

EC DECLARATION OF CONFORMITY

We,

Impacto Protective Products Inc.
P.O. Box 524, 40 Dussek
Belleville, ON K8N 5B2
Canada

Declare that the PPE described here after,

BG408

are in conformity with the provisions of Council Directive 89/686/EEC and, with the national standards no. EN 388:2016, EN 420:2003+A1:2009 and ISO 10819:2013.

this declaration of conformity is issued under the sole responsibility of the manufacturer;

The technical Construction File is maintained at the following addresses:

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Email impacto@impacto.ca
Contact Mr. Eric Lehtinen

Authorized Signatory



Date 17-Sep-19

Name:

Eric Lehtinen

Position:

President
Impacto Protective Products Inc.



Total Quality. Assured.

TEST REPORT



中国认可
国际互认
检测
TESTING
CNAS L0220

Number: GZHT90897113

Applicant: IMPACTO PROTECTIVE PRODUCTS INC
PO BOX 524, BELLEVILLE, ON CANADA
Attn: NELSA TINOCO

Date: Jul 08, 2019

Sample Description:

Two (2) groups of submitted samples said to be:
 (A) Twelve (12) pairs of BG408 protective gloves in Black
 (B) Two (2) pairs of BGHIVIS protective gloves in Orange/Yellow/Black

Standard : BS EN 420: 2003+A1: 2009
 BS EN 388: 2016

Colors : (A) Black
 (B) Orange/Yellow/Black

Size Range : 7 (S), 8 (M), 9 (L), 10 (XL), 11 (XXL)

Style Name : (A) BG408
 (B) BGHIVIS Air Gloves

Palm : Black Synthetic suede polyester

Back : (A) Black polyester mesh
 (B) Orange polyester mesh

Cuff : Black Synthetic neoprene

Cuff Binding : Black polyester

Lining : Black Nylon/Lycra

Country Of Original : CHINA

Goods Exported To : CANADA

Date Received/Date Test Started: Jun 12, 2019

Date Final Information Confirmed/ Jul 08, 2019

Date Payment Received:

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at gzfootwear@intertek.com

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Assistant General Manager

Authorized By:
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MI / fionawgyu

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1 Design And Construction (BS EN 420: 2003+A1: 2009, 4.1)

(A)	Requirement	Pass/Fail
Comply With Requirement	*	Pass

Remark: * = The Protective Glove Shall Be Designed And Manufactured So That In The Foreseeable Conditions Of Use For Which It Is Intended, The User Can Perform The Hazard Related Activity Normally Whilst Enjoying Appropriate Protection At The Highest Possible Level. If Required, The Glove Shall Be Designed To Minimize The Time Needed For Putting On And Taking Off.
When The Glove Construction Includes Seams, The Material And Strength Of The Seams Shall Be Such That The Overall Performance Of The Glove Is Not Significantly Decreased.

2 Sizing (BS EN 420: 2003+A1: 2009, 6.1)

	(A)	Requirement	Pass/Fail
Size 7 Glove Length:	245 mm	*	Pass
Size 8 Glove Length:	254 mm	*	Pass
Size 9 Glove Length:	259 mm	*	Pass
Size 10 Glove Length:	280 mm	*	Pass
Size 11 Glove Length:	285 mm	*	Pass

Remark:
*= Sizes Of Gloves

Glove Size	Fit	
7	Hands Size 7	Min. 230 mm
8	Hands Size 8	Min. 240 mm
9	Hands Size 9	Min. 250 mm
10	Hands Size 10	Min. 260 mm
11	Hands Size 11	Min. 270 mm



3 Finger Dexterity Test (BS EN 420: 2003+A1: 2009, 6.2)

(A)	The Smallest Diameter Of Pin Picked Up
Specimen 1(Left Hand):	5 mm
Specimen 2(Right Hand):	5 mm
Specimen 3(Left Hand):	5 mm
Specimen 4(Right Hand):	5 mm
Performance Level:	5 (*)

Remark: * = The Classification Is Determined By The Smallest Diameter Of Pin Picked Up Of The Four Test Specimens.

Remark:

Performance Level	The Smallest Diameter Of Pin Shall Be Picked Up
Level 1	11 mm
Level 2	9.5 mm
Level 3	8 mm
Level 4	6.5 mm
Level 5	5 mm

4 Abrasion Resistance (BS EN 388: 2016, 6.1, 9 kPa)

Adhesion Contact Time Of Test Specimen With The Double-Sided Adhesive Tape Under A Weight Of A Approximatley 10 Kg	At Least 5 Min
Surface Treatment Of Test Specimen In Order To Improve Adhesion	No Surface Treatment
Abradant	The Klingspor PL 31 B-Grit 180 Grain Aluminium Oxide
Double-Sided Adhesive Tape	3M™ Double-Sided Adhesive Tape

(A)	Observation	Specimen 1	Specimen 2	Specimen 3	Specimen 4
Layer 1 (Outer)	<u>After 100 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 500 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 2000 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 8000 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
Layer 2 (Middle)	<u>After 100 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 500 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 2000 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 8000 Cycles:</u>	Breakthrough (#2) & (#4)	Breakthrough (#3) & (#4)	No Breakthrough	No Breakthrough
Layer 3 (Inner)	<u>After 100 Cycles:</u>	Breakthrough (#1)	Breakthrough (#1)	Breakthrough (#1)	Breakthrough (#1)
The Sum Of The Numbers Of Cycles For All Layers:		Specimen 1 10000	Specimen 2 10000	Specimen 3 16000	Specimen 4 16000
Performance Level:			4 (*)		

Remark:

The Minimum Requirements For Each Level:

Level 1: 100 Cycles

Level 2: 500 Cycles

Level 3: 2000 Cycles

Level 4: 8000 Cycles

* = The Classification Is Based On The Sum Of The Numbers Of Cycles For All Layers.

#1= Breakthrough Occurred Before 20 Cycles

#2= Breakthrough Occurred Before 5500 Cycles

#3= Breakthrough Occurred Before 7400 Cycles

#4= The First Hole Resulting From The Wear Broken Through The Base Layer Of Air Cushion.



5 Blade Cut Resistance (BS EN 388: 2016, 6.2)

(A)	
Specimen 1 (Index)	Specimen 2 (Index)
I ₁ : 4.0	I ₆ : 3.9
I ₂ : 3.6	I ₇ : 4.4
I ₃ : 3.2	I ₈ : 3.6
I ₄ : 3.3	I ₉ : 3.9
I ₅ : 3.8	I ₁₀ : 4.1
Average Index: 3.6	Average Index: 4.0

The Lowest Average Index: 3.6

Performance Level: 2 (*)

Remark:

The Minimum Requirements For Each Level:

Level 1: 1.2

Level 2: 2.5

Level 3: 5.0

Level 4: 10.0

Level 5: 20.0

* = The Performance Level Is Defined As The Lowest Average Index Values Of Two Test Specimens From The Different Gloves.

6 Resistance To Cutting By Sharp Objects (BS EN 388: 2016, 6.3 & EN ISO 13997: 1999)

(A)

Test Condition: Temperature (20±2)°C; Relative Humidity (65±4)%
 Test Area: Glove Palm
 Blade Sharpness Correction Factor: 0.91

Result:

Normalized Cutting Stroke Length: -

Cutting Force (*): In Blade Cut Resistance Test, Test Specimens Did Not Dull The Blade To Specified Degree. There Is No Need To Be Performed The EN ISO 13997:1999 Cut Resistance Method.

Performance Level (#): -

Remark: * = Calculated Force That Would Be Required To Be Applied To A Blade Of Standard Sharpness To Just Cut Through A Material In A Blade Stroke Of Length 20 mm.

= Levels Of Performance For Materials Tested With EN ISO 13997

	Level A	Level B	Level C	Level D	Level E	Level F
6.3 TDM: Cut Resistance (N)	2	5	10	15	22	30



7 Tear Resistance (BS EN 388: 2016, 6.4)

	(A)			Result
	Layer 1 (Outer)	Layer 2 (Middle)	Layer 3 (Inner)	(The Max. Force Of All Layers)
Specimen 1:	47 N	111 N	48 N	111 N
Specimen 2:	48 N	102 N	54 N	102 N
Specimen 3:	62 N	89 N	43 N	89 N
Specimen 4:	55 N	84 N	43 N	84 N
Performance Level:		4 (*)		

Remark:
The Minimum Requirements For Each Level:
Level 1: 10 N
Level 2: 25 N
Level 3: 50 N
Level 4: 75 N

* = The Classification Is Determined By Taking The Lowest Of The Four Values (Which Are The Highest Values Obtained On All Layers).

8 Puncture Resistance (BS EN 388: 2016, 6.5)

	(A)
Specimen 1:	108 N
Specimen 2:	110 N
Specimen 3:	108 N
Specimen 4:	125 N
Performance Level:	3 (*)

Remark:
Level 1: 20 N
Level 2: 60 N
Level 3: 100 N
Level 4: 150 N

Remark: * = The Classification Is Determined By The Lowest Value Of The Four Test Specimens.

9 Detection Of Amines Derived From Azocolourants and Azodyes

With Reference To Test Method: Textile Method (EN 14362-1: 2012)

Amines Content Was Determined By Gas Chromatography-Mass Spectrometry (GC-MS)

	Forbidden Amine	CAS No.	Result (mg/kg)				
			(1)	(2)	(3)	(4)	(5)
1.	4-Aminodiphenyl	92-67-1	ND	ND	ND	ND	ND
2.	Benzidine	92-87-5	ND	ND	ND	ND	ND
3.	4-Chloro-o-toluidine	95-69-2	ND	ND	ND	ND	ND
4.	2-Naphthylamine	91-59-8	ND	ND	ND	ND	ND
5.	o-Aminoazotoluene	97-56-3	ND	ND	ND	ND	ND
6.	2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	ND	ND
7.	p-Chloroaniline	106-47-8	ND	ND	ND	ND	ND
8.	2,4-Diaminoanisole	615-05-4	ND	ND	ND	ND	ND
9.	4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	ND	ND
10.	3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	ND	ND
11.	3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	ND	ND
12.	3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	ND	ND
13.	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	ND	ND	ND	ND	ND
14.	p-Cresidine	120-71-8	ND	ND	ND	ND	ND
15.	4,4'-Methylene-bis(2-chloroaniline)	101-14-4	ND	ND	ND	ND	ND
16.	4,4'-Oxydianiline	101-80-4	ND	ND	ND	ND	ND
17.	4,4'-Thiodianiline	139-65-1	ND	ND	ND	ND	ND
18.	o-Toluidine	95-53-4	ND	ND	ND	ND	ND
19.	2,4-Toluylenediamine	95-80-7	ND	ND	ND	ND	ND
20.	2,4,5-Trimethylaniline	137-17-7	ND	ND	ND	ND	ND
21.	o-Anisidine	90-04-0	ND	ND	ND	ND	ND
22.	4-Aminoazobenzene	60-09-3	ND	ND	ND	ND	ND

Detection Of Amines Derived From Azocolourants and Azodyes (Cont)

	Forbidden Amine	CAS No.	Result (mg/kg)				
			(6)	(7)	(8)	(9)	(10)
1.	4-Aminodiphenyl	92-67-1	ND	ND	ND	ND	ND
2.	Benzidine	92-87-5	ND	ND	ND	ND	ND
3.	4-Chloro-o-toluidine	95-69-2	ND	ND	ND	ND	ND
4.	2-Naphthylamine	91-59-8	ND	ND	ND	ND	ND
5.	o-Aminoazotoluene	97-56-3	ND	ND	ND	ND	ND
6.	2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	ND	ND
7.	p-Chloroaniline	106-47-8	ND	ND	ND	ND	ND
8.	2,4-Diaminoanisole	615-05-4	ND	ND	ND	ND	ND
9.	4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	ND	ND
10.	3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	ND	ND
11.	3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	ND	ND
12.	3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	ND	ND
13.	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	ND	ND	ND	ND	ND
14.	p-Cresidine	120-71-8	ND	ND	ND	ND	ND
15.	4,4'-Methylene-bis(2-chloroaniline)	101-14-4	ND	ND	ND	ND	ND
16.	4,4'-Oxydianiline	101-80-4	ND	ND	ND	ND	ND
17.	4,4'-Thiodianiline	139-65-1	ND	ND	ND	ND	ND
18.	o-Toluidine	95-53-4	ND	ND	ND	ND	ND
19.	2,4-Toluylenediamine	95-80-7	ND	ND	ND	ND	ND
20.	2,4,5-Trimethylaniline	137-17-7	ND	ND	ND	ND	ND
21.	o-Anisidine	90-04-0	ND	ND	ND	ND	ND
22.	4-Aminoazobenzene	60-09-3	ND	ND	ND	ND	ND

Remark: ND = Not Detected
 Detection Limit = 5 mg/kg
 Limit = 30 mg/kg

Tested Components: Please See Component List In The Last Section Of This Report.

Conclusion:

<u>Standard</u>	<u>Result</u>
REACH Regulation (EC) No.1907/2006 Annex XVII Item 43 and its Amendments No. 552/2009 and 126/2013 (Formerly Known As Directive 2002/61/EC)	Pass

10 pH Value

As Per BS EN 420: 2003+A1: 2009, 4.3.2, With Reference To BS EN ISO 3071:2006 For Textile, KCl Solution Was Used For Extraction, pH Value Was Measured By pH Meter.

Tested Components	Result	Requirement
(1)	6.5	*
(2)	6.6	*
(3)	6.3	*
(4)	6.5	*
(5)	6.8	*
(6)	6.2	*
(7)	6.0	*
(8)	6.5	*
(9)	6.2	*
(10)	6.6	*

Temperature Of The Extracting Solution: 25.0°C

pH Of The Extracting Solution: 5.87

Remark: * = The pH Value Shall Be Greater Than 3.5 And Less Than 9.5

Tested Components: Please See Component List In The Last Section Of This Report.

Conclusion:

Standard
BS EN 420: 2003+A1: 2009 For pH Value

Result
Pass

Component List:

- (1) Black Synthetic Suede Polyester (Palm Of Sample A & B).
- (2) Black Fabric (Gaps Pf Finger Of Sample A & B).
- (3) Black Polyester Mesh (Back Of Sample A).
- (4) Black Synthetic Neoprene (Cuff Binding Of Sample A & B).
- (5) Black Polyester (Cuff Of Sample A & B).
- (6) Black Velcro (Hook Of Fastener Of Sample A & B).
- (7) Black Velcro (Loop Of Fastener Of Sample A & B).
- (8) Black Nylon/Lycra (Lining Of Sample A & B).
- (9) Orange Polyester Mesh (Back Of Sample B).
- (10) Silvery Retro-Reflective Fabric (Cuff Of Sample B).



End Of Report

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