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10 July 2018

APPLICANT: BRIGHTON BEST INTERNATIONAL (C15159)

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UNITED STATES

Date of receipt : 23 May 2018
Testing period : 11 June 2018
: 10 July 2018

Buyer: —

Reference no. : SDX2
Style / Article no. : KONG Original
Test(s) requested : EN 388/EN 420/EN 13594
Service : REGULAR
Brand / Section : —
Season : —
End use : —
Factory name : —
Factory code : —

Previous report : —
Product category : —
Product type : —
Test stage : FIRST TEST
Supplier name : —
Exported to : —

1. Conclusion:

	Tests description	Conformity
1	▲ Impact protection of knuckles EN 388/EN 420	Pass
2	(+) Abrasion resistance : 2016	Level 2
3	(+) Cut resistance : 2016	Level 1
4	(+) Cutting resistance TDM	Level Level A not reached
5	(+) Tear strength resistance: 2016	Level 2
6	(+) Puncture resistance: 2016	Level 1
7	(+) pH - Textile (KCl solution)	Pass
8	(+) Sizing	None
9	(+) Dexterity	Level 4
10	▲ Azo dyes - Textile	Pass
11	▲ Azo dyes - Textile (Blend)	Pass
12	▲ Polycyclic Aromatic Hydrocarbons	Pass
13	XRF screening	Pass
14	XRF screening (Tin)	Pass

Pass: requirements met Fail: requirements not met None: no requirement for this test N/A: not applicable

(+) HOKLAS accredited activity ▲ The test was carried out by external accredited laboratory under their accreditation scope.

●: The test was carried out by external accredited laboratory, not within their accreditation scope.

TEST REPORT

Report No.: H180502092_1

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Approved by



John CHEUNG FAI CHEONG
Laboratory Supervisor

10 July 2018

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2. Sample(s) description assigned by laboratory:

<u>Size</u>	<u>Analyzed product</u>	<u>Description</u>	<u>Sample information</u>
	20 PAIRS OF GLOVES		
		Whole glove	Orange w/orange plastic dots/Black/Orange, size: S
		Whole glove	Orange w/orange plastic dots/Black/Orange, size: M
		Whole glove	Orange w/orange plastic dots/Black/Orange, size: L
		Whole glove	Orange w/orange plastic dots/Black/Orange, size: XL
		Whole glove	Orange w/orange plastic dots/Black/Orange, size: XXL
		Palm, Material: Nylon/PU, Material: 60% Nylon, 40% PU, Thickness: 0.8mm	Black
		Reinforcement on palm/fingers, Material: 60% Nylon, 40% PU, Thickness: 1.0mm	Orange w/orange plastic dots
		Palm/Fourchettes/Reinforcement on thumb/Hand tab, Material: 60% Nylon, 40% PU, Thickness: 0.8mm	Black
		Back, Material: 95% Nylon, 5% Spandex, 450g/m2	Orange
		Cuff, Material: 60% SBR, 15% Chloroprene Rubber, 25% Nylon, Thickness: 2.0mm	Black
		Binding/Gusset, Material: Nylon/Spandex	Orange
		Lining on knuckle, Material: 100% Polyester, Thickness: 5.0mm	Black
		Plastic on Back/Knuckle/Fingers	Orange/Black
		Reinforcement on palm/fingers + Palm/Fourchettes/Reinforcement on thumb/Hand tab + Cuff	Orange w/orange plastic dots + Black + Black
		Back + Binding/Gusset + Lining on knuckle	Orange + Orange + Black
		Palm, Material: Nylon/PU, Material: 60% Nylon, 40% PU, Thickness: 0.8mm	Black

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H180502092



H180502092A



H180502092B



H180502092C

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3. 20 PAIRS OF GLOVES/

Whole glove : Orange w/orange plastic dots/Black/Orange, size: S

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				9	
Total length of the glove			mm	250	
(+) 5.2. Dexterity	EN 420:2003+A1:2009				
Smallest diameter of the pin picked up			mm	6.5	
Performance Level				4	

Whole glove : Orange w/orange plastic dots/Black/Orange, size: M

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				10	
Total length of the glove			mm	260	

Whole glove : Orange w/orange plastic dots/Black/Orange, size: L

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				10	
Total length of the glove			mm	265	
▲ Impact protection of knuckles	EN 13594: 2015				Pass
The protector cover 4 phalanges				Conform	
Cracks, deterioration of the glove or the appearance of sharp edges				Conform	
Tear of the chamois leather				Conform	
Single result		≤ 9.0	kN	4.7	
Single result (2)		≤ 9.0	kN	4.6	
Single result (3)		≤ 9.0	kN	4.9	
Single result (4)		≤ 9.0	kN	5.1	
Mean transmitted force		≤ 7.0	kN	4.8	

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Whole glove : Orange w/orange plastic dots/Black/Orange, size: XL

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				11	
Total length of the glove			mm	270	

Whole glove : Orange w/orange plastic dots/Black/Orange, size: XXL

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Total length of the glove			mm	280	

Palm, Material: Nylon/PU, Material: 60% Nylon, 40% PU, Thickness: 0.8mm : Black

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.1. Abrasion resistance : 2016	EN 388 : 2016				
used consumables - abrasive				Klingspor PL31B Grit 180	
used consumables - adhesive				3M Scotch	
Number of cycles at the hole detection				1150	
Number of cycles at the hole detection (2)				1500	
Number of cycles at the hole detection (3)				1900	
Number of cycles at the hole detection (4)				1900	
Performance level				2	
(+) 4.1. Cut resistance : 2016	EN 388 : 2016				
used consumables - canvas				LEM 6	
used consumables - blade				OLFA RB45	
C1				1.0	
T1				0.6	
1C1				1.0	
I1				1.6	
C2				1.0	
T2				0.6	
1C2				1.0	
I2				1.6	

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	Method	Client Requirement	Unit	Result	Conformity
C3				1.0	
T3				0.6	
1C3				1.0	
I3				1.6	
C4				1.0	
T4				0.7	
1C4				1.1	
I4				1.7	
C5				1.1	
T5				0.7	
1C5				1.1	
I5				1.6	
Mean value of test piece 1				1.6	
C1 bis				1.1	
T1 bis				0.7	
2C1bis				1.2	
I1 bis				1.6	
C2 bis				1.2	
T2 bis				0.8	
2C2bis				1.3	
I2 bis				1.6	
C3 bis				1.3	
T3 bis				0.8	
2C3bis				1.3	
I3 bis				1.6	
C4 bis				1.3	
T4 bis				0.8	
2C4bis				1.3	
I4 bis				1.6	
C5 bis				1.3	
T5 bis				0.8	
2C5bis				1.5	
I5 bis				1.6	
Mean value of test piece 2				1.6	

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	Method	Client Requirement	Unit	Result	Conformity
Considered value				1.6	
Performance level				1	
(+) 4.1. Tear strength resistance: 2016	EN 388 : 2016				
Tear strength			N	33	
Tear strength (2)			N	36	
Tear strength (3)			N	40	
Tear strength (4)			N	37	
Performance level				2	
(+) 4.1. Puncture resistance: 2016	EN 388 : 2016				
Puncture resistance			N	30	
Puncture resistance (2)			N	31	
Puncture resistance (3)			N	34	
Puncture resistance (4)			N	34	
Performance level				1	

Reinforcement on palm/fingers, Material: 60% Nylon, 40% PU, Thickness: 1.0mm : Orange w/orange plastic dots

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.0	
▲ Polycyclic Aromatic Hydrocarbons	ISO/TS 16190: 2013				Pass
Naphthalene			ppm	0.3	
Acenaphthylene			ppm	<0.1	
Acenaphthene			ppm	<0.1	
Fluorene			ppm	<0.1	
Phenanthrene			ppm	<0.1	
Anthracene			ppm	<0.1	
Fluoranthene			ppm	<0.1	
Pyrene			ppm	<0.1	
Benzo(a)anthracene		<1	ppm	<0.1	
Chrysene		<1	ppm	<0.1	

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	Method	Client Requirement	Unit	Result	Conformity
Benzo(b)fluoranthene + Benzo(j) fluoranthene		<1	ppm	<0.2	
Benzo(k)fluoranthene		<1	ppm	<0.1	
Benzo(a)pyrene		<1	ppm	<0.1	
Indeno(1,2,3-cd)pyrene			ppm	<0.1	
Dibenzo(a,h)anthracene		<1	ppm	<0.1	
Benzo(g,h,i)perylene			ppm	<0.1	
Benzo(e)pyrene		<1	ppm	<0.1	
Sum of PAHs tested			ppm	0.3	
XRF screening	ASTM F2617 – 15				Pass
Cd (Cadmium)		<100	ppm	<100	
XRF screening (Tin)	ASTM F2617 – 15				Pass
Sn (Tin)		<150	ppm	<150	

Palm/Fourchettes/Reinforcement on thumb/Hand tab, Material: 60% Nylon, 40% PU, Thickness: 0.8mm : Black

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.2	
▲ Polycyclic Aromatic Hydrocarbons	ISO/TS 16190: 2013				Pass
Naphthalene			ppm	0.7	
Acenaphthylene			ppm	<0.1	
Acenaphthene			ppm	<0.1	
Fluorene			ppm	<0.1	
Phenanthrene			ppm	0.1	
Anthracene			ppm	<0.1	
Fluoranthene			ppm	<0.1	
Pyrene			ppm	<0.1	
Benzo(a)anthracene		<1	ppm	<0.1	
Chrysene		<1	ppm	<0.1	
Benzo(b)fluoranthene + Benzo(j) fluoranthene		<1	ppm	<0.2	
Benzo(k)fluoranthene		<1	ppm	<0.1	
Benzo(a)pyrene		<1	ppm	<0.1	

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	Method	Client Requirement	Unit	Result	Conformity
Indeno(1,2,3-cd)pyrene			ppm	<0.1	
Dibenzo(a,h)anthracene		<1	ppm	<0.1	
Benzo(g,h,i)perylene			ppm	<0.1	
Benzo(e)pyrene		<1	ppm	<0.1	
Sum of PAHs tested			ppm	0.8	
XRF screening	ASTM F2617 – 15				Pass
Cd (Cadmium)		<100	ppm	<100	

Back, Material: 95% Nylon, 5% Spandex, 450g/m2 : Orange

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.1	

Cuff, Material: 60% SBR, 15% Chloroprene Rubber, 25% Nylon, Thickness: 2.0mm : Black

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.2	

Binding/Gusset, Material: Nylon/Spandex : Orange

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.1	

Lining on knuckle, Material: 100% Polyester, Thickness: 5.0mm : Black

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCl solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		7.3	

Plastic on Back/Knuckle/Fingers : Orange/Black

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	Method	Client Requirement	Unit	Result	Conformity
XRF screening Cd (Cadmium)	ASTM F2617 – 15	<100	ppm	<100	Pass

Reinforcement on palm/fingers + Palm/Fourchettes/Reinforcement on thumb/Hand tab + Cuff : Orange w/orange plastic dots + Black + Black

	Method	Client Requirement	Unit	Result	Conformity
▲ Azo dyes - Textile Azo dyes	EN 14362-1 : 2012	<30	mg/kg	<5	Pass

Back + Binding/Gusset + Lining on knuckle : Orange + Orange + Black

	Method	Client Requirement	Unit	Result	Conformity
▲ Azo dyes - Textile (Blend) Azo dyes	EN 14362-1 : 2012	<30	mg/kg	<5	Pass

Palm, Material: Nylon/PU, Material: 60% Nylon, 40% PU, Thickness: 0.8mm : Black

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.1. Cutting resistance TDM used consumables - blade Coefficient of variation Adjusted factor for blade with neoprene Mean cut length on neoprene for a load of 5.0 N Normalized cutting stroke lengths Normalized cutting stroke lengths (2) Normalized cutting stroke lengths (3) Normalized cutting stroke lengths (4) Normalized cutting stroke lengths (5) Mean normalized cutting stroke length Cut load adjusted for a cut length of 20 mm Level Performance	EN ISO 13997:1999			Lot 105 3.2 0.78 28.0 24.5 20.6 21.5 22.9 19.6 21.8 1.8 Level A not reached	

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	Method	Client Requirement	Unit	Result	Conformity
<p>H180502092 - ISO</p> 					

END OF TEST REPORT

(+) HOKLAS accredited activity

▲: The test was carried out by external accredited laboratory under their accreditation scope.

Table of Performance Level for Glove

Test Item	Performance Level					
	0##	1	2	3	4	5
Abrasion Resistance (EN 388) Number of cycles (minimum)	<100	100	500	2000	8000	---
Blade Cut Resistance (EN 388) Index (I) (minimum)	<1.2	1.2	2.5	5.0	10.0	20.0
Tear Resistance (EN 388) Force (N) (minimum)	<10	10	25	50	75	---
Puncture Resistance (EN 388) Force (N) (minimum)	<20	20	60	100	150	---
Dexterity (EN 420) Diameter of pin (in mm)	---	11.0	9.5	8.0	6.5	5.0

Performance level 0 means the glove falls below the minimum performance level for the given individual hazard

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