

Number: GZHT90810885

Date: Jul 20, 2018

Sample Description:

Five (5) groups of submitted samples said to be:
(A) Twelve (12) pairs of LD01 Black Cow Split Leather Gloves For Family Fireplace
(B) Two (2) pairs of LD01-1 Black Cow Split Leather Gloves For Family Fireplace
(C) Three (3) pairs of LD02 Black Cow Split Leather Gloves For Family Fireplace
(D) Six (6) pieces of LD02-1 Split Leather Gloves For Family Fireplace
(E) One (1) piece of Black Cow Split Leather.

Standard : BS EN 420: 2003+A1: 2009
BS EN 388: 2016
EN 407:2004
Style No./Name : (A) LD01
(B) LD01-1
(C) LD02
(D) LD02-1
Colors : Black
Size Range : Only One Size
Palm : Black Cow Split Leather
Back : Black Cow Split Leather
Cuff : Black Cow Split Leather
Cuff Binding : Black Cow Split Leather
Lining : Black Polyester Fleece
Country Of Origin : China
Goods Exported To : Europe, North America
Date Received/Date Test Started: Jul 05, 2018
Date Final Information Confirmed/ Jul 13, 2018/Jul 20, 2018
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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1 Design And Construction (BS EN 420: 2003+A1: 2009, 4.1)

(A)	Requirement	Pass/Fail
Comply With Requirement	*	Pass
(C)	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
Glove Length: 370 mm	*	-
Corresponding Size (By Extrapolation): 21 (#)		
(C)	Requirement	Pass/Fail
Glove Length: Not Applicable	*	-

Remark:

= The Size Is Derived By Extrapolation Of The Data In Below Table In Accordance With BS EN 420: 2003, 5.1

* = Sizes Of Gloves

Glove Size	Fit	
6	Hands Size 6	Min. 220 mm
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):	9.5 mm
Specimen 2(Left Hand):	9.5 mm
Specimen 3(Right Hand):	9.5 mm
Specimen 4(Right Hand):	9.5 mm
Performance Level:	2 (*)

(C)	The Smallest Diameter Of Pin Picked Up
Specimen 1(Left/Right Hand):	Not Applicable
Specimen 2(Left/Right Hand):	Not Applicable
Specimen 3(Left/Right Hand):	Not Applicable
Specimen 4(Left/Right Hand):	Not Applicable
Performance Level:	- (*)

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

	Observation	Specimen 1	Specimen 2	Specimen 3	Specimen 4
Layer 2 (Inner)	<u>After 100 Cycles:</u>	No Breakthrough	No Breakthrough	No Breakthrough	No Breakthrough
	<u>After 500 Cycles:</u>	Breakthrough	Breakthrough	Breakthrough	Breakthrough

	Specimen 1	Specimen 2	Specimen 3	Specimen 4
The Sum Of The Numbers Of Cycles For All Layers:	8100	8100	8100	8100

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.

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

(A)	
Specimen 1 (Index)	Specimen 2 (Index)
I ₁ : 2.1	I ₆ : 4.0
I ₂ : 2.6	I ₇ : 3.5
I ₃ : 2.6	I ₈ : 2.2
I ₄ : 2.2	I ₉ : 2.6
I ₅ : 3.1	I ₁₀ : 2.7
Average Index: 2.5	Average Index: 3.0

The Lowest Average Index: 2.5

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:

0.80

Normalized Cutting Stroke Length:

25.0 mm

Result:

Cutting Force (*):

-

Performance Level (#):

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

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)		
	Layer 1 (Outer)	Layer 2 (Inner)	Result (The Max. Force Of All Layers)
Specimen 1:	101 N	23 N	101 N
Specimen 2:	60 N	20 N	60 N
Specimen 3:	99 N	22 N	99 N
Specimen 4:	108 N	25 N	108 N
Performance Level:	3 (*)		

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:	176 N
Specimen 2:	166 N
Specimen 3:	183 N
Specimen 4:	137 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 Burning Behaviour (EN 407:2004, 5.1)

	(A)	
Flame Application Time	3 Seconds	15 Seconds
After-Flame Time (Seconds)	0	0
After-Glow Time (Seconds)	0	0
Observation (*):	The Innermost Surface Of The Glove Showed No Sign Of Melting. The Seam Did Not Come Apart In The Test Area	The Innermost Surface Of The Glove Showed No Sign Of Melting. The Seam Did Not Come Apart In The Test Area
Performance Level:	4	

Remark: * = If It Melts, The Material Shall Not Drip. Furthermore The Innermost Surface Of The Glove Shall Be Inspected. It Shall Show No Sign Of Melting, Otherwise It Fails The Test. The Seam Shall Not Come Apart After An Ignition Time Of 15 s In The Test Area.

Performance Level	After-Flame Time (s)	After-Glow Time (s)
1	≤ 20	No Requirement
2	≤ 10	≤ 120
3	≤ 3	≤ 25
4	≤ 2	≤ 5

This Test Was Conducted At 3F, Hengyun Building, No.235 Kaifa Avenue, GETDD

10 Contact Heat (EN 407:2004, 5.2)

(A)			
Contact Temperature		Threshold Time	
	Specimen 1		39.0 Seconds
	Specimen 2		37.0 Seconds
100°C	Specimen 3		37.8 Seconds
	Average		38 Seconds
Contact Temperature		Threshold Time	
	Specimen 1		10.6 Seconds
	Specimen 2		9.8 Seconds
250°C	Specimen 3		9.9 Seconds
	Average		10 Seconds

Performance Level: 1 (*)

Remark: * =

Performance Level	Contact Temperature T _c (°C)	Threshold Time t _t (seconds)
1	100	≥ 15
2	250	≥ 15
3	350	≥ 15
4	500	≥ 15

11 Convective Heat (EN 407:2004, 5.3)

(A)	<u>Palm (HTI)</u>	<u>Back Of Hand (HTI)</u>
Specimen 1:	20.2 Seconds	20.0 Seconds
Specimen 2:	19.0 Seconds	18.4 Seconds
Specimen 3:	18.4 Seconds	18.4 Seconds
Average:	19 Seconds	19 Seconds
Performance Level:	4 (*)	

Remark: * = A Level Of Performance In Convective Heat Is Reported Only If A Performance Level Of 3 Or 4 Is Obtained In Burning Behaviour.

Performance Level	Heat Transfer Index HTI (S)
1	≥ 4
2	≥ 7
3	≥ 10
4	≥ 18

12 Radiant Heat (EN 407:2004, 5.4, Heat Flux Density: 20 kW/m²)

(A)

Specimen 1: 52.1 Seconds
Specimen 2: 56.2 Seconds
Mean: 54 Seconds
Performance Level: 3 (*)

Remark: * = A Level Of Performance In Radiant Heat Is Reported Only If A Performance Level Of 3 Or 4 Is Obtained In Burning Behaviour.

Performance Level	Heat Transfer t ₂₄ (S)
1	≥ 7 Seconds
2	≥ 20 Seconds
3	≥ 50 Seconds
4	≥ 95 Seconds

13 Resistance To Small Splashes Of Molten Metal (EN 407:2004, 5.5)

(A)

Glove Palm Area: > 40
Glove Back Area: > 40
Performance Level: 4 (*)

Remark: * = A Level Of Performance In Small Splashes Of Molten Metal Is Reported Only If A Performance Level Of 3 Or 4 Is Obtained In Burning Behaviour.

Performance Level	Number Of Droplets
1	≥ 10
2	≥ 15
3	≥ 25
4	≥ 35

14 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.

As Per BS EN 420: 2003+A1: 2009, 4.3.2, With Reference To EN ISO 4045:2008 For Leather, pH Value Was Measured By pH Meter.

Tested Components	Results	Requirement
(1)	3.65	*
(2)	6.2	*

Temperature Of The Extracting Solution: 22.4°C

pH Of The Extracting Solution: 6.40

Remark: * = The pH Value Shall Be Greater Than 3.5 And Less Than 9.5 And For Method EN ISO 4045:2008 The Difference Figure Do Not Need To Test.

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

15 Chromium (VI)(Cr(VI)) Content

As Per BS EN 420: 2003+A1: 2009, 4.3.3, With Reference To BS EN ISO 17075:2007, The Hexavalent Chromium Content Was Determined By UV-Visible Spectrophotometry.

<u>Tested Component</u>	<u>Result (mg/kg)</u>	<u>Requirement</u>
(1)	ND	ND (< 3 mg/kg)

Remark: Detection Limit = 3 mg/kg

ND = Not Detected

mg/kg = milligram per kilogram

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

Conclusion:

Standard

BS EN 420: 2003+A1: 2009 For
Chromium (VI) Content

Result

Pass

16 Detection Of Amines Derived From Azocolourants and Azodyes

With Reference To Test Method: Textile Method (EN 14362-1: 2012)
Leather Method (ISO 17234-1:2010)
P-Aminoazobenzene (ISO 17234-2:2011)

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

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

Standard
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)

Result
Pass

17 Pentachlorophenol (PCP) Content:

With Reference To ISO 17070:2015, Analysis By Gas Chromatographic-Mass Spectrometric (GC-MS)

Tested Component	Result In mg/kg	Limit In mg/kg
(1)	ND	5

Remark: Detection Limit = 0.5 mg/kg
ND=Not Detected

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

Conclusion:

Test Item	Result
Pentachlorophenol (PCP) Content	Pass

Component List:

- (1) Black Split Leather (Palm/Back/Cuff/Cuff Binding Of Sample A)
- (2) Black Polyester Fleece (Lining Of Sample A)

End Of Report

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