



# TEST REPORT

Report Ref: LEHTX00101329	
Date Received : 25/08/2017	Date Issued: 01/09/2017

Company Name & Address	Dirty Rigger Gloves & Accessories Sawtry Way Unit 1, Houghton Hill Industries Cambridge PE28 2DH
Contact Name:	Steven Marshall

Order No.:	
Description:	Protector V2
Colour (S) :	Black
Supplier:	
End Use:	Gloves
Quoted Composition:	
Ref / Style No.	
Quality:	
Batch No.:	
Specification:	EN 388: 2016 / EN 420: 2003 + A1: 2009

Tests Conducted	Method	Sample	Pass/Fail
^Gloves – Abrasion Resistance	EN 388 - 6.1		Level 3
^Gloves – Blade Cut Resistance	EN 388 - 6.2		Level 1
^Gloves – Tear Strength	EN 388 - 6.4		Level 3
^Gloves – Puncture Resistance	EN 388 - 6.5		Level 1
^Gloves – Design & Construction	EN 420		Pass
^Gloves – Sizing	EN 420		See Results
^Gloves – Dexterity	EN 420		Level 3
^Gloves – Impact Resistance	EN 388 - 6.6		Level 1
^Determination of pH of Textile Material	EN ISO 3071		Pass
^Detection of Amines Derived from Azocolourants and Azodyes	EN 14362-1		Pass
^Determination of pH in Leather	EN ISO 4045		Pass
^Determination of Chromium VI	EN ISO 17075		Pass
^Azo Dyes in Leather	EN ISO 17234-1		Pass

**RESULTS:** See attachment

**COMMENT:** Where the results of a test fall close to the requirement, compliance with the specification

may be affected by the uncertainty of measurement of the test.

In those circumstances, the client is advised to contact the laboratory for further

information

Unmarked tests included in this report are on our UKAS Scope 1516.

Tests marked (^) in this Report are included in the UKAS Scope of the sub-contractor who performed the test.

Tests marked (\*) in this Report are not included in our UKAS Scope 1516.

Tests marked (\*\*) in this Report are not included in the UKAS Scope for the sub-contractor who performed the test. Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

Note: A sub-contractor whose certification comes under the ILAC agreement would also be marked in the same manner as a UKAS sub-contractor.

Steven Owen (Laboratory Manager)

UKAS UKAS







9341 ^GLOVES - ABRASION RESISTANCE EN 388:2016 6.1					
SAMPLE	Results Per	rformance Levels			
Protector V2 Gloves	Holes developed before 8000 cycles  Level 1: greater than 100 less than 500 Level 2: greater than 500 less than 200 Level 3: greater than 2000 less than 80 Level 4: greater than 8000 cycles				
9342 ^GLOVES - EN 388:201	BLADE CUT RESISTANCE 6 6.2				
SAMPLE	RESULTS	Performance Level:			
	Sample 1	Level 1: 1.2			
	11   12   13   14   15	Level 2: 2.5			
	1.5 1.5 1.3 1.5 1.4	Level 3: 5.0			
Protector V2 Gloves	Average Index: 1.4	Level 4: 10.0			
Protector v2 Gloves	Sample 2	Level 5: 20.0			
	16 17 18 19 110	LCVCI 3. 20.0			
	1.4 1.5 1.5 1.5 1.5	:			
	Average Index: 1.5	·			
EN 388:201		Doufournance Loyale			
SAMPLE	Results	Performance Levels			
		Level 1: >10 N			
Protector V2 Gloves	50 N	Level 2: >25 N			
	0011	Level 3: >50 N			
9340					
SAMPLE	Results	Performance Levels			
Protector V2 Gloves	50 N	Level 1: >20 N Level 2: >60 N Level 3: >100 N Level 4: >150 N			
9490 ^GLOVES - DESIGN AND CONSTRUCTION BS EN 420:2003 + A1: 2009					
SAMPLE	Results	REQUIREMENT			
Protector V2 Gloves	Meets Requirements	Shall meet the design and construction			

requirements





9344 ^GLOVES - SIZING BS EN 420:2003 + A1: 2009							
SAMPLE	Results						
	Size: S found	d to be Size 5	Size: M four	nd to be Size 5	Size: L fo	und to be Size 6	
Protector V2 Gloves	Glove Length	: 210 mm	Glove Length	n: 218 mm	Glove Leng	th: 220 mm	
9344							
SAMPLE			R	esults			
		nd to be Size 6		found to be ize 7	Size: fo	und to be Size	
Protector V2 Gloves	Glove Length:	: 223 mm	Glove Length	n: 230 mm			
9345 ^GLOVES - D BS EN 420:20	EXTERITY 003 + A1: 2009						
SAMPLE	Results						
5	Specimen 1		Specimen 2		Specimen 3		
Protector V2 Gloves	Left:	8 mm	Left:		Left:	8 mm	
	Right:		Right:	8 mm	Right:		
9345 ^GLOVES - D BS EN 420:20	DEXTERITY 003 + A1: 2009						
SAMPLE			R	esults			
D	Speci	men 4	Specii	men	Spe	cimen	
Protector V2 Gloves	Left:		Left:		Left:		
	Right:	8 mm	Right:		Right:		
EN 388: 20	0991						
SAMPLE		RES	BULTS		RE	QUIREMENT	
	Mass of Striker: 2.5 kg						
	Impact Energy: 5 ±0.1 J					Single Result:	
	Test Area: Knuckles					Leve; 1: ≤9.0 kN Level 2: ≤5.0 kN	
D20 Public Order	Results (kN)			Mean T	ransmitted Force:		
	Highest Peak Force 4.9			Lev	Leve; 1: ≤5.0 kN Level 2: ≤4.0 kN		
		Mean Force	4.7		Let	/CI	







#### 

SAMPLE	RESULTS		REQUIREMENTS
	pH of Aqueous Extract		
	Sample	Mean	
	Black Synthetic Fabric (Palm & Finger)	6.3	
	Grey Micro fibre (Palm & Lining)	6.2	
	Black Knitted (Back & Finger)	6.2	
Protector V2 Gloves	Black Fabric (Cuff)	6.7	3.5 <ph<905< td=""></ph<905<>
Cioves	Black Micro Fibre (Finger & Finer Grip)	6.5	0.0 pm 000
	Black Loop (Velcro)	6.4	
	Black Hook (Velcro)	6.3	
	Black Fabric (Lining)	6.5	
	Black Fabric (Cuff Binding)	6.4	
	Temperature of Solution:	22.7°C	

#### 8022 ^DETECTION OF AMINES DERIVED FROM AZOCOLOURANTS AND AZODYES BS EN 14362-1: 2012

Protector V2 Gloves:-

1) Black Synthetic Fabric (Palm & Finger), 2) Grey Micro Fiber (Palm & Lining), 3) Black Knitted (Back & Finger), 4) Black Fabric (Cuff), 5) Black Micro Fiber (Finger & Finer Grip)

By Gas Chromatographic – Mass Spectrometric (GC-MS) and High Performance Chromatographic (HPLC) analysis

METHOD	Textile Method
REQUIREMENTS	<30 mg/kg
	D14

		Result				
Banned Amine In Azo Dyes	CAS Number			Samples		
		1	2	3	4	5
4-Aminodiphenyl	92-67-1	ND	ND	ND	ND	ND
Benzidine	92-87-5	ND	ND	ND	ND	ND
4-Chloro-O-Toluidine	95-69-2	ND	ND	ND	ND	ND
2-Naphthylamine	91-59-8	ND	ND	ND	ND	ND
*o-Aminoazotoluene	97-56-3	ND	ND	ND	ND	ND
*2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	ND	ND
p-Chloroaniline	106-47-8	ND	ND	ND	ND	ND
2,4-Diamino-Anisole	615-05-4	ND	ND	ND	ND	ND
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	ND	ND
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	ND	ND
3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	ND	ND
4,4'diamino-3,3'-dimethylphenyl methane	838-88-0	ND	ND	ND	ND	ND
p-Cresidine	120-71-8	ND	ND	ND	ND	ND
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	ND	ND	ND	ND	ND
4,4'-Oxydianiline	101-80-4	ND	ND	ND	ND	ND
4,4'-Thiodianiline	139-65-1	ND	ND	ND	ND	ND
o-Toluidine	95-53-4	ND	ND	ND	ND	ND
2,4-toluylenediamine	95-80-7	ND	ND	ND	ND	ND
2,4,5-Trimethyl aniline	137-17-7	ND	ND	ND	ND	ND
o-Anisidine	90-04-0	ND	ND	ND	ND	ND
**P-aminoazobenzene	60-09-3	ND	ND	ND	ND	ND

#### Note:

Detection limit: 5 mg/kg , ND: Not Detected, The allowed limit specified <30 mg/kg

REACH Regulation (EC) NO. 1907/2006 Annex XVII Item 43 and its Amendment No. 552/2009 and 126/2013 (Formerly Known As Directive 2002/61/EC)

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<sup>\*\*</sup> EN 14362-3:2012 / ISO 17234-2: 2011 = P-Aminoazobenzene Method



## 8022 ^DETECTION OF AMINES DERIVED FROM AZOCOLOURANTS AND AZODYES BS EN 14362-1: 2012

Protector V2 Gloves:-

6) Black Loop (Velcro), 7) Black Hook (Velcro), 8) Black Fabric (Lining), 9) Black Fabric (Cuff Binding).

By Gas Chromatographic - Mass Spectrometric (GC-MS) and High Performance Chromatographic (HPLC) analysis

METHOD Textile Method

REQUIREMENTS <30 mg/kg

REQUIRENTS	<50 mg/kg					
			Res	sult		
Banned Amine In Azo Dyes	CAS Number	Samples				
		6	7	8	9	
4-Aminodiphenyl	92-67-1	ND	ND	ND	ND	
Benzidine	92-87-5	ND	ND	ND	ND	
4-Chloro-O-Toluidine	95-69-2	ND	ND	ND	ND	
2-Naphthylamine	91-59-8	ND	ND	ND	ND	
*o-Aminoazotoluene	97-56-3	ND	ND	ND	ND	
*2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	ND	
p-Chloroaniline	106-47-8	ND	ND	ND	ND	
2,4-Diamino-Anisole	615-05-4	ND	ND	ND	ND	
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	ND	
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	ND	
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	ND	
3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	ND	
4,4'diamino-3,3'-dimethylphenyl methane	838-88-0	ND	ND	ND	ND	
p-Cresidine	120-71-8	ND	ND	ND	ND	
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	ND	ND	ND	ND	
4,4'-Oxydianiline	101-80-4	ND	ND	ND	ND	
4,4'-Thiodianiline	139-65-1	ND	ND	ND	ND	
o-Toluidine	95-53-4	ND	ND	ND	ND	
2,4-toluylenediamine	95-80-7	ND	ND	ND	ND	
2,4,5-Trimethyl aniline	137-17-7	ND	ND	ND	ND	
o-Anisidine	90-04-0	ND	ND	ND	ND	
**P-aminoazobenzene	60-09-3	ND	ND	ND	ND	

## Note:

Detection limit: 5 mg/kg, ND: Not Detected, The allowed limit specified <30 mg/kg

REACH Regulation (EC) NO. 1907/2006 Annex XVII Item 43 and its Amendment No. 552/2009 and 126/2013 (Formerly Known As Directive 2002/61/EC)





<sup>\*\*</sup> EN 14362-3:2012 / ISO 17234-2: 2011 = P-Aminoazobenzene Method





## 9493 ^DETERMINATION OF pH in LEATHER BS EN ISO 4045: 2008

SAMPLE	RESULT	REQUIREMENTS	
Protector V2	рН		
Gloves – Black Leather (Palm & Finger)	Mean:	4.20	3.5 <ph<9.5< td=""></ph<9.5<>
	Temperature of Solution:	22.7°C	

## 9494 ^DETERMINATION OF CHROMIUM (VI) CONTENT BS EN ISO 17075: 2007 by UV-VIS Spectrophotometer

SAMPLE	Results	REQUIREMENT
Protector V2 Gloves – Black Leather (Palm & Finger)	Not Detected	<3 mg/kg

**^AZO DYES** 

BS EN ISO 17234-1: 2015

Protector V2 Gloves – Black Leather (Palm & Finger)

Determination of Certain aromatic Amines derived from azo colourants follows by GC-MS Analysis

		,	,
REQUIREMENTS	<30 mg	ı/kg	
Banned Amine In Azo Dyes		CAS Number	Result
4-Aminodiphenyl		92-67-1	ND
Benzidine		92-87-5	ND
4-Chloro-O-Toluidine		95-69-2	ND
2-Naphthylamine		91-59-8	ND
*o-Aminoazotoluene		97-56-3	ND
*2-Amino-4-nitrotoluene		99-55-8	ND
p-Chloroaniline		106-47-8	ND
2,4-Diamino-Anisole		615-05-4	ND
4,4'-Diaminodiphenylmethane		101-77-9	ND
3,3'-Dichlorobenzidine		91-94-1	ND
3,3'-Dimethoxybenzidine		119-90-4	ND
3,3'-Dimethylbenzidine		119-93-7	ND
4,4'diamino-3,3'-dimethylphenyl methane		838-88-0	ND
p-Cresidine		120-71-8	ND
4,4'-Methylene-bis(2-chloroaniline)		101-14-4	ND
4,4'-Oxydianiline		101-80-4	ND
4,4'-Thiodianiline		139-65-1	ND
o-Toluidine		95-53-4	ND
2,4-toluylenediamine		95-80-7	ND
2,4,5-Trimethyl aniline		137-17-7	ND
o-Anisidine		90-04-0	ND
**P-aminoazobenzene		60-09-3	ND

## Note:

Detection limit: 5 mg/kg ND: Not Detected

The allowed limit specified <30 mg/kg

REACH Regulation (EC) NO. 1907/2006 Annex XVII Item 43 and its Amendment No. 552/2009 and 126/2013 (Formerly Known As Directive 2002/61/EC)

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<sup>\*\*</sup> EN 14362-3:2012 / ISO 17234-2: 2011 = P-Aminoazobenzene Method







# **End of Report**

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