





Page 1/6

3F, Building Block 2, No. 3400 Gonghexin Road, Jing'an District - Shanghai 200436, P.R. CHINA 上海市静安区共和新路3400号2幢3层

Tél.: +86 21 68 55 50 32 Fax: +86 21 68 55 50 33 E-mail: ctcshanghai@ctcgroupe.com

Franky YANG / franky yang@raxwell.cn

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

3501, 5F SUNPLUS BUILDING, NO. 1077 ZUCHONGZHI DD PUDONG NEW DISTRICT 上海市浦东新区祖冲之路1077号凌阳大

厦5楼3501 SHANGHAI CHINA

Date of receipt :13 Aug. 2020

Testing period :13 Aug. 2020

:19 Aug. 2020

Sample description: RW2432Raxwell 涤纶针织PU工作手套,掌浸/RW2432Raxwell Polyester Knit Glove with Palm-Dipped

Polyurethane Coating

Style / Article no. :RW2432

Buyer: --

Test(s) requested :— For CE Marking : Yes
Service : REGULAR Previous report :

Brand / Section :-- Product category :-Season :-- Product type :--

End use :-- Test stage :FIRST TEST

Factory name :-- Supplier name :-- Exported to :--

#### 1. Conclusion:

	<u>Tests description</u>	<u>Conformity</u>
	EN ISO 21420/EN 388	
1	Abrasion resistance : 2016	Level 3
2	Tear strength resistance: 2016	Level 4
3	Puncture resistance: 2016	Level 1
4	pH - Textile (KCl solution)	Pass
5	Dimethylformamide (DMF/DMFo/DMFa)	Pass
6	Polycyclic Aromatic Hydrocarbons (8)	Pass
7	Dexterity	Level 5

	<u>Tests description</u>	<u>Conformity</u>
8	Aromatic amines derived from azo colorants	Pass

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







Page 2/6

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

Approved by

Henry YAN Laboratory Manager 1 WL 12

Yvonne MAO Senior Analytical Chemical Engineer







Page 3/6

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

### 2. Sample(s) description assigned by laboratory:

Size	Analyzed product	<u>Description</u>	Sample information
	GLOVE		
		Whole glove	
		white PU palm	
		white polyester back	
		white/orange polyester/elastic cuff	



200808191







Page 4/6

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

### 3. GLOVE/

#### Whole glove

	Method	Client Requirement	Unit	Result	Conformity
▲ 4.2. Dimethylformamide (DMF/DMFo/DMFa)	EN 16778: 2016				Pass
Dimethylformamide			mg/kg	208.7	
Dimethylformamide (2)			mg/kg	168.8	
Dimethylformamide - average		<1000	mg/kg	188.8	
5.2. Dexterity	EN ISO 21420: 2020				
Smallest diameter of pin fulfilling test condition			mm	5.0	
Smallest diameter of pin fulfilling test condition (2)			mm	5.0	
Smallest diameter of pin fulfilling test condition (3)			mm	5.0	
Smallest diameter of pin fulfilling test condition (4)			mm	5.0	
Performance level				5	

## white PU palm

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.1. Abrasion resistance : 2016	EN 388:2016 + A1:2018				
Deviation from the test method				No	
used consumables - abrasive				Klingspor PL31B Grit 180	
used consumables - adhesive				3M Scotch	
Number of cycles at the hole detection				>8000	
Number of cycles at the hole detection (2)				7600	
Number of cycles at the hole detection (3)				6800	
Number of cycles at the hole detection (4)				6000	
Performance level				3	
(+) 4.1. Tear strength resistance: 2016	EN 388:2016 + A1:2018				
Tear strength			N	>75	
Tear strength (2)			N	>75	
Tear strength (3)			N	>75	

The report is issued by CTC Shanghai under its General Conditions printed overleaf. The results shown in this report refer only to the sample (s) tested. Except by special arrangement, the test items will not be retained by CTC Shanghai for more than 3 months. The test report shall not be reproduced, except in full, without the written approval of the testing laboratory.







Page 5/6

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

	海 / 有限公司 (C41441)						
	Method	Client Requirement	Unit	Result	Conformity		
Tear strength (4)			N	>75			
Performance level				4			
(+) 4.1. Puncture resistance: 2016	EN 388:2016 + A1:2018						
Puncture resistance			N	26			
Puncture resistance (2)			N	35			
Puncture resistance (3)			N	42			
Puncture resistance (4)			N	43			
Performance level				1			
(+) 4.2. pH - Textile (KCI solution)	ISO 3071:2020				Pass		
pH value		3.5< - <9.5		6.9			
▲ 4.2. Polycyclic Aromatic Hydrocarbons (8)	ISO/TS 16190: 2013				Pass		
Benzo(a)anthracene		<1	mg/kg	<0.1			
Chrysene		<1	mg/kg	<0.1			
Benzo(b)fluoranthene		<1	mg/kg	<0.1			
Benzo(k)fluoranthene		<1	mg/kg	<0.1			
Benzo(a)pyrene		<1	mg/kg	<0.1			
Dibenzo(a.h)anthracene		<1	mg/kg	<0.1			
Benzo(e)pyrene		<1	mg/kg	<0.1			
Benzo(j)fluoranthene		<1	mg/kg	<0.1			

### white polyester back

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.2. pH - Textile (KCI solution)	ISO 3071:2020				Pass
pH value		3.5< - <9.5		7.3	

### white/orange polyester/elastic cuff

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.2. pH - Textile (KCI solution)	ISO 3071:2020				Pass
pH value		3.5< - <9.5		6.8	

The report is issued by CTC Shanghai under its General Conditions printed overleaf. The results shown in this report refer only to the sample (s) tested. Except by special arrangement, the test items will not be retained by CTC Shanghai for more than 3 months. The test report shall not be reproduced, except in full, without the written approval of the testing laboratory.







Page 6/6

Report No.: S200808191\_1

19 August 2020

APPLICANT: RAXWELL INDUSTRIAL TECHNOLOGY

(SHANGHAI) CO. LTD瑞氪维尔工业科技(上

海)有限公司 (C41441)

	74: 14:11-14: 7						
	Method	Client Requirement	Unit	Result	Conformity		
Aromatic amines derived from azo colorants	ISO 14362-1:2017 (combined extraction)				Pass		
Accessible with fibre extraction		<30	mg/kg	<5			
Accessible without fibre extraction		<30	mg/kg	<5			

### **END OF TEST REPORT**

(+)CNAS accreditation

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

#### **Table of Performance Level for Glove**

Test Item	Performance Level						
100.1011	0##	1	2	3	4	5	
Abrasion Resistance (EN 388) Number of cycles (minimum)	<100	100	500	2000	8000		
Tear Resistance (EN 388) Force (N) (minimum)	<10	10	25	50	75		
Puncture Resistance (EN 388) Force (N) (minimum)	<20	20	60	100	150		
Finger dexterity (EN ISO 21420) Smallest diameter of pin fulfilling test conditions (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

