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中国认可 国际互认 检测 TESTING CNAS L4577

### TEST REPORT

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Report No.: S190709491\_1

06 August 2019

APPLICANT: NANO-METRE INDUSTRIAL LTD 上海千汇实业

有限公司 (C00175)

ROOM 904, LVDIHECHUANG BUILDING,

NO. 450, CAOYANG ROAD 200063 SHANGHAI

CHINA

Date of receipt :31 July 2019

:31 July 2019 Testing period

:06 Aug. 2019

18gauge knitted nylon liner/NBR fully coated palm glove Sample description:

Style / Article no. :NY1859-B

Buyer: --

Test(s) requested For CE Marking: Yes Service :REGULAR Previous report Brand / Section :--Product category Season Product type

End use : PROTECTIVE GLOVES Test stage :FIRST TEST

Factory name Supplier name

Exported to :USA, EUROPE Factory code

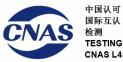
#### 1. Conclusion:

	<u>Tests description</u>	<u>Conformity</u>
1	4.1. Abrasion resistance : 2016 : EN 388 : 2016	Level 2
2	4.1. Cut resistance : 2016 : EN 388 : 2016	Level 1
3	4.1. Puncture resistance: 2016 : EN 388 : 2016	Level 1
4	4.3.2. pH - Textile (KCl solution) : EN ISO 3071:2006	Pass
5	5.1.2. Sizing : EN 420:2003+A1:2009	None
6	5.2. Dexterity: EN 420:2003+A1:2009	Level 5
7	Aromatic amines derived from azo colorants : ISO 14362-1:2017 (combined extraction)	Pass
8	Polycyclic Aromatic Hydrocarbons : ISO/TS 16190: 2013	Pass
9	Tear strength resistance: 2016 : EN 388 : 2016	Level 2
10	XRF screening (Tin): ASTM F2617 – 15	Pass
11	XRF screening : ASTM F2617 – 15	Pass

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







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Approved by

Henry YAN

Laboratory Manager

Tony SHU

Chemical lab supervisor







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

<u>Size</u>	Analyzed product	<u>Description</u>	Sample information
	GLOVE		
		Whole glove(with green binding)	
		Whole glove(with grey binding)	
		Whole glove(with yellow binding)	
		Whole glove(with brown binding)	
		Whole glove(with black binding)	
		blue nitrile palm	
		blue/white nylon/elastic cuff	



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#### 3. GLOVE/

#### Whole glove (with green binding)

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				7	
Total length of the glove			mm	234	
(+) 5.2. Dexterity	EN 420:2003+A1:2009				
Smallest diameter of the pin picked up			mm	5.0	
Performance Level				5	

#### Whole glove (with grey binding)

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				8	
Total length of the glove			mm	242	

### Whole glove (with yellow binding)

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				9	
Total length of the glove			mm	254	

#### Whole glove (with brown binding)

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				10	
Total length of the glove			mm	261	

### Whole glove (with black binding)

	Method	Client Requirement	Unit	Result	Conformity
(+) 5.1.2. Sizing	EN 420:2003+A1:2009				
Size				11	

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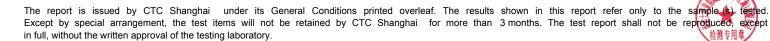
APPLICANT: NANO-METRE INDUSTRIAL LTD 上海千汇实业

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	Method	Client Requirement	Unit	Result	Conformity
Total length of the glove		Requirement	mm	271	

#### blue nitrile palm

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.1. Abrasion resistance : 2016	EN 388 : 2016				
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				1350	
Number of cycles at the hole detection (2)				1350	
Number of cycles at the hole detection (3)				1200	
Number of cycles at the hole detection (4)				1600	
Performance level				2	
(+) 4.1. Cut resistance : 2016	EN 388 : 2016				
Deviation from the test method				No	
used consumables - canvas				LEM 6	
used consumables - blade				OLFA RB45	
C1				1.2	
T1				0.2	
1C1				1.3	
11				1.2	
C2				1.3	
T2				0.4	
1C2				1.3	
12				1.3	
C3				1.3	
Т3				0.4	
1C3				1.3	
13				1.3	
C4				1.3	
Т4				0.4	
1C4				1.3	
14				1.3	
C5				1.3	
T5				0.5	









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	Method	Client Requirement	Unit	Result	Conformity
1C5		•		1.2	
15				1.4	
Mean value of test piece 1				1.3	
C1 bis				0.9	
T1 bis				0.2	
2C1bis				0.9	
I1 bis				1.2	
C2 bis				0.9	
T2 bis				0.2	
2C2bis				1.1	
I2 bis				1.2	
C3 bis				1.1	
T3 bis				0.2	
2C3bis				1.1	
I3 bis				1.2	
C4 bis				1.1	
T4 bis				0.2	
2C4bis				1.2	
I4 bis				1.2	
C5 bis				1.2	
T5 bis				0.2	
2C5bis				1.2	
I5 bis				1.2	
Mean value of test piece 2				1.2	
Considered value				1.2	
Performance level				1	
Observation				No comment	
(+) 4.1. Puncture resistance:	EN 388 : 2016				
Puncture resistance			N	66	
Puncture resistance (2)			N	64	
Puncture resistance (3)			N	55	
Puncture resistance (4)			N	52	
Performance level				1	
(+) 4.3.2. pH - Textile (KCI	EN ISO 3071:2006				Pass
solution) pH value		3.5< - <9.5		7.9	
pi i value		3.5\ - \9.5		1.8	







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	Method	Client Requirement	Unit	Result	Conformity		
(+) Tear strength resistance: 2016	EN 388 : 2016						
Tear strength			N	40			
Tear strength (2)			N	51			
Tear strength (3)			N	37			
Tear strength (4)			N	41			
Performance level				2			
▲ Polycyclic Aromatic Hydrocarbons	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			
▲ XRF screening	ASTM F2617 – 15				Pass		
Cd (Cadmium)		<100	ppm	<100			
• XRF screening (Tin)	ASTM F2617 – 15				Pass		
Sn (Tin)		<150	ppm	<150			

#### blue/white nylon/elastic cuff

	Method	Client Requirement	Unit	Result	Conformity
(+) 4.3.2. pH - Textile (KCI solution)	EN ISO 3071:2006				Pass
pH value		3.5< - <9.5		6.9	
▲ 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.
- •: The test was carried out by external accredited laboratory, not within their accreditation scope.









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#### **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

