

**Products**



**TÜVRheinland®**  
Precisely Right.

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**Client:** P.P INTERTRADE 2020 CO., LTD.

**Contact Information:** 72, 74 Soi Chalermprakeat Ror 9 Soi 34 Nongbon, Pravet, Bangkok 10250

**Identification / Model No(s):** Nitrile glove

**Sample Receiving date:** 2020-10-26

**Sample Resubmitted date:** 2020-11-04

**Testing Period:** 2020-10-26 to 2020-11-18

**Delivery condition:** *Apparent good, Samples tested as received*

<b>Test Specification:</b>	<b>Test result:</b>
Test parameters chosen by customer:	
1. EN 455-1: 2020: Requirements for freedom from holes	PASS
2. EN 455-2: 2015: Physical properties test;	
- Dimension test	PASS
- Force at break test	PASS
3. EN 455-3: 2015 , Annex A : Proteins extraction by aqueous	Refer to result page

**Other information:**  
Country of Origin: Thailand

**For and on behalf of**  
**TÜV Rheinland Thailand Ltd.**



2020-12-23 Wilawan Sriprom / Manager

**Date** **Name/Position**

*Test result is drawn according to the kind and extent of tests performed.*  
*This test report relates to the above mentioned Test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*



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Material list:

Item: Nitrile gloves

Material No.	Material	Color	Location
M001	Nitrile glove	Blue	S size
M002	Nitrile glove	Blue	M size
M003	Nitrile glove	Blue	L size



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Freedom from holes \*

Test method: With reference to EN 455-1: 2020

Test result:

Gloves Size	Tested samples	No. of samples for Non-compliance	Conclusion
S	200	1	Pass
M	200	1	Pass
L	200	0	Pass

Remark:

- Information of batch size or sample size is not provided by client.
- All samples were selected and supplied by the client.
- According to test requirement, each lot shall be samples for single sampling plan using general inspection level I and corresponding acceptance/rejection number equivalent to sample size code letter L. The compliance level for freedom from holes shall be an AQL of 0.65 for surgical gloves and 1.5 for examination gloves.
- A minimum sample size equivalent to sample size code letter L ensure that an adequate assessment of the quality of the lot is obtained when the lot size is small or unknown.

Inspection level	Sample size	AQL	Accept	Reject
G-I, code letter L	200	0.65	3	4
G-I, code letter L	200	1.5	7	8

- \* The test item is not under accreditation scope of ISO/IEC 17025.


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## Dimension test

Test method: With reference to EN 455-2: 2015

## Test results:

Test No.:	T001		T002	
Material No.:	M001		M002	
Size:	S		M	
Tested no.	Length (mm)	Width (mm)	Length (mm)	Width (mm)
1	250	83	251	94
2	253	80	252	94
3	246	85	248	94
4	248	85	254	95
5	251	82	247	95
6	250	84	255	94
7	248	80	249	94
8	247	82	248	94
9	242	82	250	94
10	249	84	250	95
11	249	83	250	94
12	250	82	244	93
13	249	82	245	94
Median result	249	83	249	94
Conclusion	Pass	Pass	Pass	Pass

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Test No.:	T003	
Material No.:	M003	
Size:	L	
Tested no.	Length (mm)	Width (mm)
1	250	105
2	245	100
3	242	101
4	245	104
5	240	100
6	244	100
7	258	102
8	244	102
9	250	105
10	245	102
11	245	105
12	245	105
13	243	103
Median result	246	103
Conclusion	Pass	Pass

Abbreviation: mm = millimeter

Remark: Dimension limit reference to table

Size	Median length (mm)	Median width (mm)
Extra small	≥ 240	≤ 80
Small		80±10
Medium		95±10
Large		110±10
Extra large		≥ 110

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## Force at break

Test method: With reference to EN 455-2: 2015

## Test results:

Test No.	T001		T003	
Material No.	M001		M003	
Tested no.	Before ageing (N)	After ageing (N)	Before ageing (N)	After ageing (N)
1	6.00	5.78	6.91	8.09
2	8.18	4.90	7.60	10.55
3	7.21	6.84	7.72	9.03
4	6.19	4.77	8.80	6.96
5	6.14	5.66	7.46	10.19
6	8.62	7.77	9.34	10.19
7	7.22	7.23	8.13	11.09
8	6.56	5.62	7.20	8.15
9	9.06	6.43	9.04	7.09
10	6.87	4.94	8.13	10.56
11	7.46	8.07	8.81	7.39
12	6.71	5.01	7.53	11.03
13	6.85	5.06	7.76	7.47
Median result	7.16	6.01	8.03	9.06
Conclusion	Pass	Pass	Pass	Pass

Abbreviation: N = Newton

## Remark:

1. Median values of force at break

Force at Break (newton)		
a)	b)	c)
≥ 9.0	≥ 6.0	≥ 3.0

a) Requirements for all surgical gloves

b) Requirements for all examination gloves, except gloves made from thermoplastic materials (e.g. Polyvinylchloride, Polyethylene)

c) Requirements for gloves made from thermoplastic materials (e.g. Polyvinylchloride, Polyethylene)

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**Proteins extraction**

Test method: With reference to EN 455-3: 2015, Annex A.

Test result:

Test No.	Material No.	Test parameter	Unit	MDL	Test result
T001	M001	Proteins	µg/g	3	n.d.
T002	M002	Proteins	µg/g	3	n.d.
T003	M003	Proteins	µg/g	3	n.d.

Abbreviation: n.d. = Not Detected (&lt;MDL)

MDL = Method Detection Limit

µg/g = Microgram per gram

Remark: According to standard requirement, the leachable protein level shall be "As Low As Reasonable Practicable" (ALARP)

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Sample photo:

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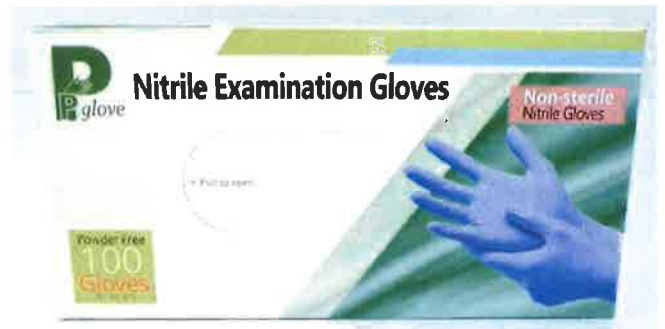
M001



M002



M003



- END -