

# MEDICAL EXAMINATION NITRILE GLOVE





# You're protected.

Our gloves will be manufactured through rigorous tests based on the corresponding regulations. We will ensure the demand and protection in accordance with the highest quality standards.

There will be 96 product lines at the end of 2021, and the daily output of each machine will be approximately 1 million.





# Serves Worldwide





Troy, Michigan



Wiesbaden



Chennai



Kuala Lumpur



Konggang, Tianjin

Chengdu, Sichuan

Kunshan, Jiangsu

Ningbo,Zhejiang

Guangzhou, Guangdong

Mianyang, Sichuan

Wuhan, Hubei

Qinpu,Shanghai

Qingyuan, Guangdong

Zhuhai, Guangdong

# Inhouse Production



Personalized Service and 24/7 Online Tracking System

# Increasing Efficiency



Raw Material Supply Chain Management & Control

# Short Leadtime



Overseas Distribution Centers

# Risk Control & Management

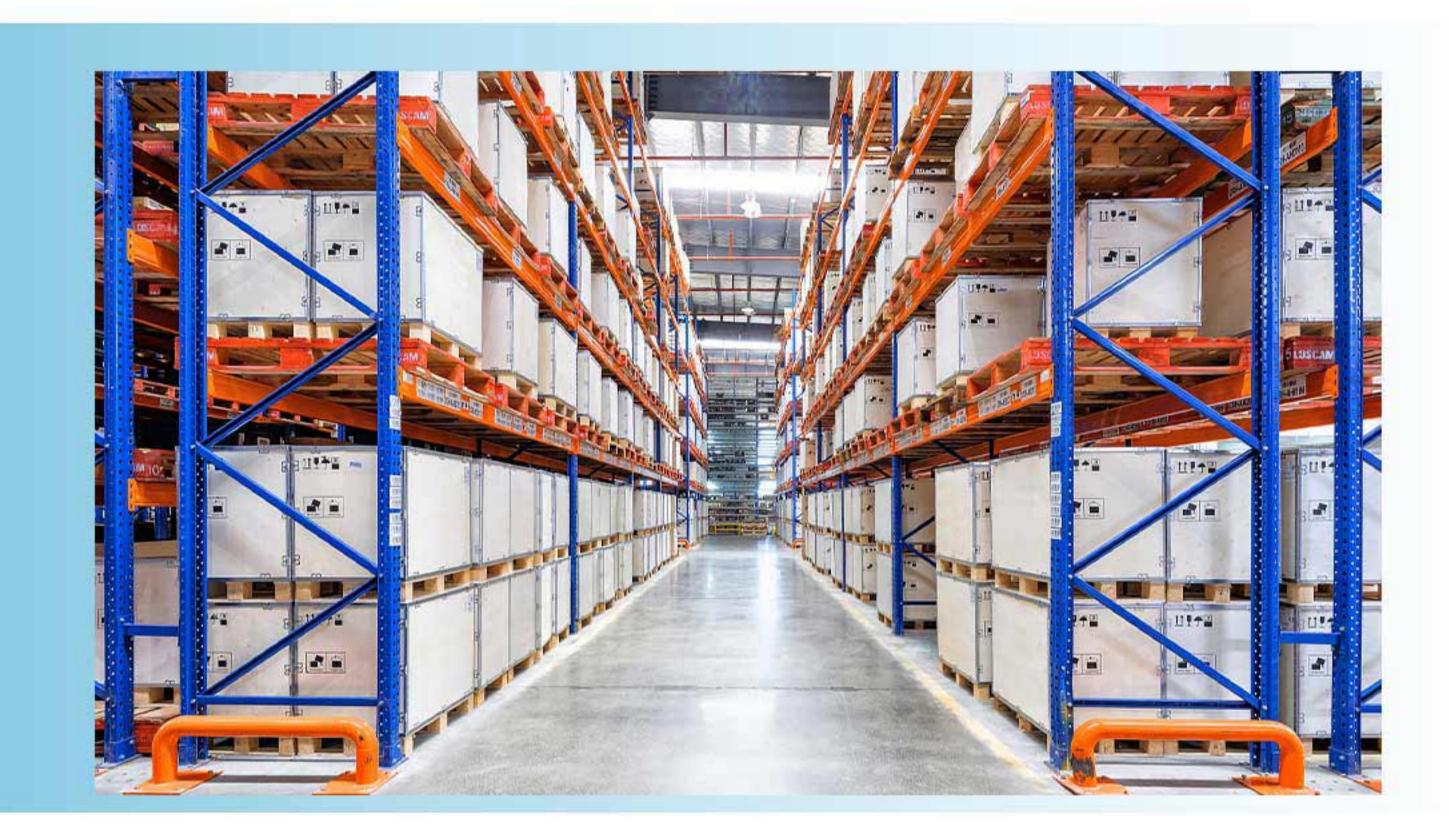


SGS Inspection and Quality Control



# Focus on supplier management, new products development and quality control.

Strong Supply System



Excellent
Technology
Team



Various
Kinds of
Products



Kingfa makes full use of its own technology accumulated in the modified plastics industry for many years. With the experience and advantages of process control and test certifications, we have successfully developed nitrile gloves with excellent physical properties, tactile sensitivity, chemical resistance and virus resistance, which can provide effective protection for people.

# MODEL: KS-ST RT021



Chemical	Letter	Level
40% Sodium hydroxide	K	2
Туре	(	2

# FEATURE

- Fingertip textured
- Powder Free
- Latex Free
- Multifunctional
- Blue colour

# APPLICATION

The disposable nitrile gloves are designed for the health care personnel to prevent contamination during close contact with the patient. The products are single-use, powder-free and non-sterile.

# STANDARD COMPLIAINCE

**PPE Cat III** according to Regulation (EU) 2016/425 EN ISO 21420:2020 Protective gloves — General requirements and test methods

EN ISO 374-1: 2016 Terminology and performance requirements for chemical risks

EN 374-2:2014: Determination of resistance to penetration EN 16523-1:2015+A1:2018 Permeation by potentially hazardous liquid chemicals under conditions of continuous contact

EN ISO 374-4:2019 Determination of resistance to degradation by chemicals

EN ISO 374-5:2016 Terminology and performance requirements for microorganisms risks

# Medical Device Class I

EN 455-1: Requirements and testing for

freedom from holes

EN 455-2: Requirements and testing for physical properties

EN 455-3: Requirements and testing for

biological evaluation EN 455-4: Requirements and testing for

shelf life determination

Food contact approved









EN ISO 210420







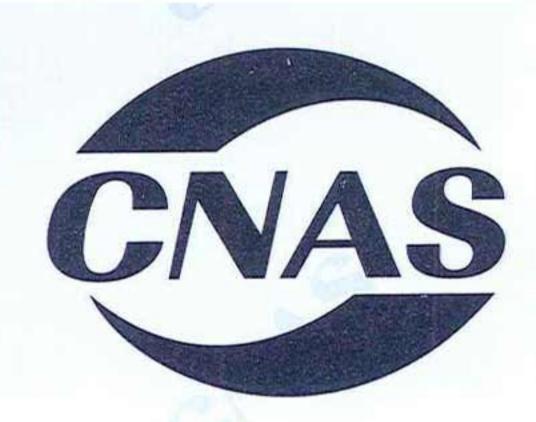




# **Quality Control System Certification**

ISO 17025 Certification





# China National Accreditation Service for Conformity Assessment LABORATORY ACCREDITATION CERTIFICATE

(Registration No. CNAS L2647)

Analytical Center of Kingfa Science & Technology Co., Ltd.

(Legal Entity: Kingfa Science & Technology Co., Ltd.)

No.33, Kefeng Road, Science City, Hi-Tech Industrial Development Zone,

Guangzhou, Guangdong, China

is accredited in accordance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake the service described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Effective Date: 2019-09-06
Expiry Date: 2023-07-02

Signed on behalf of China National Accreditation Service for Conformity Assessment



China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Accreditation Cooperation Mutual Recognition Arrangement (APAC MRA).

The validity of the certificate can be checked on CNAS website at http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml.

# Test Report EN 455

# Test Report No. 7191250395-EEC21-WBH dated 07 Jan 2021

Note: This report is issued subject to the Testing and Certification Regulations of the TÜV SÜD Group and the General Terms and Conditions of Business of TÜV SÜD PSB Pte Ltd. In addition, this report is governed by the terms set out within this report.

### SUBJECT:

Testing of Gloves submitted by Guangdong Kingfa Sci.& Tech. Co., Ltd. on 10 Dec 2020.



### **TESTED FOR:**

Guangdong Kingfa Sci.& Tech. Co., Ltd. No. 28 Delong Avenue, Shijiao Town, Qingcheng District, Qingyuan City, Guangdong Province, China

### **TEST DATE:**

11 Dec 2020 to 02 Jan 2021

### **DESCRIPTION OF SAMPLES:**

S/N	Product Description	Brand/ Model	Size	Colour	Lot No.	Expiry Date	Sample Received (pieces)	Manufacturer
1	Nitrile Examination Glove	KS-ST RT021	М	Blue	25007031	2023-07-15	The state of the s	Guangdong Kingfa Sci.& Tech. Co., Ltd.

Lot size as specified by client: 35,001 to 150,000 pieces

### **METHOD OF TEST:**

- EN 455-1:2020 Medical gloves for single use Part 1: Requirements and testing for freedom from holes
- EN 455-2:2015 Medical gloves for single use
   Part 2: Requirements and testing for physical properties
- EN 455-3:2015 Medical glove for single use
   Part 3: Requirements and testing for biological evaluation



Laboratory:
TÜV SÜD PSB Pte. Ltd.
TÜV SÜD @ IBP
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Co. Reg: 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
TÜV SÜD @ IBP
15 International Business Park
Singapore 609937



# Test Report EN 455

# Test Report No. 7191250395-EEC21-WBH dated 07 Jan 2021



### **RESULTS:**

Sample: Nitrile Examination Glove, KS-ST RT021, Blue, Size M

### Table 1: Results for EN 455-1:2020

Clause	Tests	Requirements	No. of non-compliers allowed (pieces)	Number tested (pieces)	Actual no. of non-compliers found (pieces)	Inferred
<b>4 5</b>	Freedom from holes	Shall not leak	7	200	2	Passed

### Table 2: Results for EN 455-2:2015 Clauses 4-5

Clause	Tests	Requirements (Median)	Number tested (pieces)	Results (Median)	Inferred
1	Dimensions a) Length (mm)	≥ 240	13	252	Passed
4	b) Width (mm)	For Size M: 95 ± 10	13	96	Passed
	Strength a) Force at break (N)	For nitrile examination gloves: ≥ 6.0	13	10.6	Passed
5	b) Force at break after challenge testing (N) 7 days at (70±2)°C	For nitrile examination gloves: ≥ 6.0	13	9.3	Passed

### Table 3: Results for EN 455-2:2015 Clause 7

Clause	Tests	Requirements	Results	Inferred results
7	Labelling	Manufacturers shall label the glove and/or the packaging with the date of manufacture in accordance with EN ISO 15223-1:2012 and EN 1041:2008+A1:2013. Date of manufacture is defined as the packaging date.	Comply	Passed

# Test Report No. 7191250395-EEC21-WBH dated 07 Jan 2021



### RESULTS (cont'd):

Sample: Nitrile Examination Glove, KS-ST RT021, Blue, Size M

Table 4: Results for EN 455-3:2015 Clauses 4.2-4.5

Clause	Tests	Requirements	Results / Remarks	Inferred results
4 2	Chamicala	Gloves shall not be dressed with talcum powder (magnesium silicate).	Glove is talcum powder-free glove, based on client's declaration letter	Passed
4.2 Chemicals	Other chemicals	Manufacturer shall disclose upon request a list of chemical ingredients	NA	
4.3 5.1	Endotoxins	< 20 EU/pair for gloves labelled with 'low endotoxin content'.	Not labelled with 'low endotoxin content'	NA
4.4 5.2	Powder- free gloves	For powder-free gloves: The total quantity of powder residues shall not exceed 2 mg per glove.	0.18 mg per glove	Passed
4.5 5.3	Proteins, leachable	The manufacturer shall strive to minimize the leachable protein level for gloves containing natural rubber latex.	Not natural rubber latex glove	NA

Table 5: Results for EN 455-3:2015 Clause 4.6

Clause	Tests	Requirements	Results
		In addition to the labelling specified in EN 1041:2008+A1:2013 and the relevant symbols given in EN ISO 15223-1:2012, the following requirements apply:	
		<ul> <li>a) medical gloves containing natural rubber latex shall be labelled on the packaging of at least the smallest packaging unit with the EN ISO 15223-1:2012 symbol for latex;</li> </ul>	NA
		The labelling shall include the following or equivalent warning statement together with the symbol: '(Product) contains natural rubber latex which may cause allergic reactions, including anaphylactic responses';	NA
4.6	Labelling	<ul> <li>b) the labelling shall include a prominent indication of whether the glove is powdered or powder-free;</li> </ul>	Comply
		<ul> <li>c) sterile powdered gloves shall be labelled with the following or equivalent: 'CAUTION: Surface powder shall be removed aseptically prior to undertaking operative procedures in order to minimize the risk of adverse tissue reactions';</li> </ul>	NA
		<ul> <li>d) for any medical glove containing natural rubber latex the product labelling shall not include:         <ul> <li>any term suggesting relative safety, such as low allergenicity, hypoallergenicity or low protein;</li> <li>any unjustified indication of the presence of allergens;</li> </ul> </li> </ul>	NA
		e) if the manufacturer labels the gloves with the protein content, the process limit, measured as specified in 5.3 shall be given.	NA
		Inferred results	Passed



# Test Report EN 455

Test Report No. 7191250395-EEC21-WBH dated 07 Jan 2021



### REMARKS:

- 1. Labelling requirements are assessed based on the submitted packaging artwork by client.
- 2. NA: Not applicable for the submitted sample.

Yeo Poh Kwang Associate Engineer

Wong Bee Hui
Product Manager
Medical Health Services (NAM)

## **APPENDIX:**



Photo 2: Packaging artwork for Nitrile Examination Glove, KS-ST RT021, Blue, Size M

# Test Report No. 7191250395-EEC21-WBH dated 07 Jan 2021



### Please note that this Report is issued under the following terms:

- 1. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment. Unless otherwise stated in this report, no tests were conducted to determine long term effects of using the specific product/equipment.
- The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no
  responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information
  supplied.
- Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.
- 4. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.
- 5. Unless otherwise stated, the tests were carried out in TÜV SÜD PSB Pte Ltd, 15 International Business Park Singapore 609937.
- The tests carried out by TÜV SÜD PSB and this report are subject to TÜV SÜD PSB's General Terms and Conditions of Business and the Testing and Certification Regulations of the TÜV SÜD Group.





# **Test Report** EU Type Examination Certificate

# EU TYPE EXAMINATION CERTIFICATE

intertek

Issued to

: GUANGDONG KINGFA SCI.&TECH.CO., LTD.

NO.28 DELONG AVENUE, SHIJIAO TOWN, QINGCHENG DISTRICT,

QINGYUAN CITY, GUANGDONG PROVINCE, CHINA

CE

**APPROVED BODY 0362** 

The gloves detailed herein meets the criteria of an EU Type Examination in accordance with Annex V, including the applicable clauses of the Essential Health and Safety Requirements of the PPE Regulation EU 2016/425 for Category III products.

This has been shown through satisfactory testing to EN ISO 21420:2020, EN ISO 374-1:2016 +A1 2018 EN ISO 374-2:2019, EN ISO 374-4:2013 and examination of the Technical File Documentation.

Following an EU Declaration of Product Conformity, you are hereby licensed to mark the product(s) detailed in accordance with Article 17 of the PPE Regulation EU 2016/425

ITS Testing Services (UK) Ltd.
Centre Court
Meridian Business Park
Leicester, LE19 1WD
United Kingdom

Issue Date : 12 November 2020

Expiry Date : 12 November 2025

Certificate No. : LECF100381894

Product reference : Nitrile Gloves KS-ST RT021

EN ISO 21420:2020 Performance level achieved

General requirements

Dexterity 5
Sizes M/L

EN ISO 374-1:2016+A1 2018

degradation by chemicals

Protective gloves against dangerous Chemicals and Micro-organisms

Chemical Letter Level Sodium hydroxide 40% K 2

Туре

EN ISO 374-2:2019 Pass/Fail

Determination of resistance to penetration

Water leak
Air leak
Pass
Pass
Pass
Pass
Fail

Perforation test Pass

The products detailed above shall also be subject to regular assessments in accordance with Module C2 of the PPE Regulation 2016/425



For and on behalf of ITS Testing Services (UK) Limited

intertek.com Registered in England No. 1408264 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex CM14 5NQ
This certificate is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Certificate. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

# EN ISO 374-4



SATRA Technology Centre Ltd Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD United Kingdom Tel: +44 (0) 1536 410000 Fax +44 (0) 1536 410626 email: info@satra.com

www.satra.com



SATRA Technology Services (Dongguan) Ltd SATRA reference: CHM0305368/2048/LC Customer details:

Unit 110, Xinzhongyin Garden

CHT0305236

Hongwei Road

Your reference:

Xiping, Nancheng District DONGGUAN CITY

21st December 2020 Date of report:

Guangdong Province China

Samples received: 23rd November 2020

523079

Date(s) work

16th to 21st December

carried out:

2020

# **TECHNICAL REPORT**

SATRA Technology Services (Dongguan) Ltd:

Customer: GUANGDONG KINGFA SCI.&TECH. CO., LTD

NO.28 Delong Avenue, Shijiao Town

**Qingcheng District** Qingyuan Guangdong

China

Subject: EN ISO 374-4:2019 determination of resistance to degradation by dangerous

chemicals on gloves described as Disposable Powder Free Nitrile Examination

Gloves, Color: Blue, Reference number: KS-ST RT021.

# Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

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A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

The uncertainty of the results (UoM) in this report is based on a standard uncertainty multiplied by a coverage factor k=2, which provides a coverage probability of approximately 95%.

Report signed by:

**Lucy Cove** 

Position:

**Technologist** 

Department:

Chemical & Analytical Technology

(Page 1 of 5)



# Test Report EN ISO 374-4





### **WORK REQUESTED:**

Samples of gloves described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021 were received on the 23rd November 2020 for testing in accordance with EN ISO 374-4:2019.

### SAMPLE SUBMITTED:



Sample described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021.

### **CONCLUSION:**

When assessed in accordance with EN ISO 374-4:2019 the samples of gloves described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021 achieved the following degradation results:

Chemical	Mean degradation / %
40% Sodium hydroxide (CAS: 1310-73-2)	-65.6

### **TESTING REQUIRED:**

EN ISO 374-4:2019. Protective gloves against dangerous chemicals and microorganisms. Part 4: Determination of resistance to degradation by chemicals.

SATRA Technology Services (Dongguan) Ltd SATRA Reference: CHM0305368/2048/LC/B 21st December 2020 Date:

(Page 2 of 5)





## RESULTS:

Sample description:	Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021			
Challenge chemical:	40% Sodiur	40% Sodium hydroxide (CAS: 1310-73-2)		
Test temperature / °C:		$(23 \pm 1)$		
Degradation / 9/	Glove 1 Glove 3	Glove 3		
Degradation / %:	-56.0	-61.2	-79.5	
Mean degradation (DR) / %:		-65.6		
Standard deviation (σ <sub>DR</sub> ) / %:		12.4		
UoM / ± %:		9.1		
Appearance of samples after testing:		No change		

NOTE: Lining materials were removed from the specimen in order to perform the test.

SATRA Technology Services (Dongguan) Ltd SATRA Reference: CHM0305368/2048/LC/B 21st December 2020 Date:



# Test Report EN ISO 374-1



SATRA Technology Centre Ltd
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email: info@satra.com
www.satra.com



Customer details: SATRA Technology Services (Dongguan) Ltd SATRA reference: CHM0305368/2048/LC

Unit 110, Xinzhongyin Garden

Hongwei Road Your reference: CHT0305236

Xiping, Nancheng District
DONGGUAN CITY

Guangdong Province
China

Date of report: 21st December 2020

Samples received: 23rd November 2020

523079 Date(s) work 4th to 8th December

carried out: 2020

# **TECHNICAL REPORT**

SATRA Technology Services (Dongguan) Ltd:

Customer: GUANGDONG KINGFA SCI.&TECH. CO., LTD

NO.28 Delong Avenue, Shijiao Town

Qingcheng District Qingyuan Guangdong China

Subject:

EN 16523-1:2015+A1:2018 resistance to permeation by chemicals on gloves described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021.

### Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

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Report signed by: Lucy Cove Position: Technologist

Department: Chemical & Analytical Technology

(Page 1 of 6)

l-une





### WORK REQUESTED:

Samples of gloves described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021 were received on the 23rd November 2020 for testing in accordance with EN 16523-1:2015+A1:2018 and assessment in accordance with the requirements of EN ISO 374-1:2016+A1:2018.

### SAMPLES SUBMITTED:



Samples described as Disposable

Gloves, Color: Blue, Reference number: KS-ST RT021

Powder Free Nitrile Examination

### CONCLUSION:

When assessed in accordance with the requirements of EN ISO 374-1:2016+A1:2018 the samples of gloves described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021 achieved the following performance levels:

Chemical	Performance level
40% Sodium hydroxide (CAS: 1310-73-2)	6

Full results are reported in the following tables.

### **TESTING REQUIRED:**

EN 16523-1:2015+A1:2018 - Determination of material resistance to permeation by chemicals -Part 1: Permeation by liquid chemical under conditions of continuous contact

SATRA Technology Services (Dongguan) Ltd CHM0305368/2048/LC/A SATRA Reference: Date:

21st December 2020

(Page 2 of 6)



# Test Report EN ISO 374-1





### RESULTS AND REQUIREMENTS:

EN ISO 374-1:2016+A1:2018 - Protective gloves against dangerous chemicals and micro-organisms -Part 1: Terminology and performance requirements for chemical risks. Table 1: Permeation performance levels.

Permeation performance level	Measured breakthrough time (minutes)
1	>10
2	>30
3	>60
4	>120
5	>240
6	>480

Performance levels are based on the lowest individual result achieved per chemical.

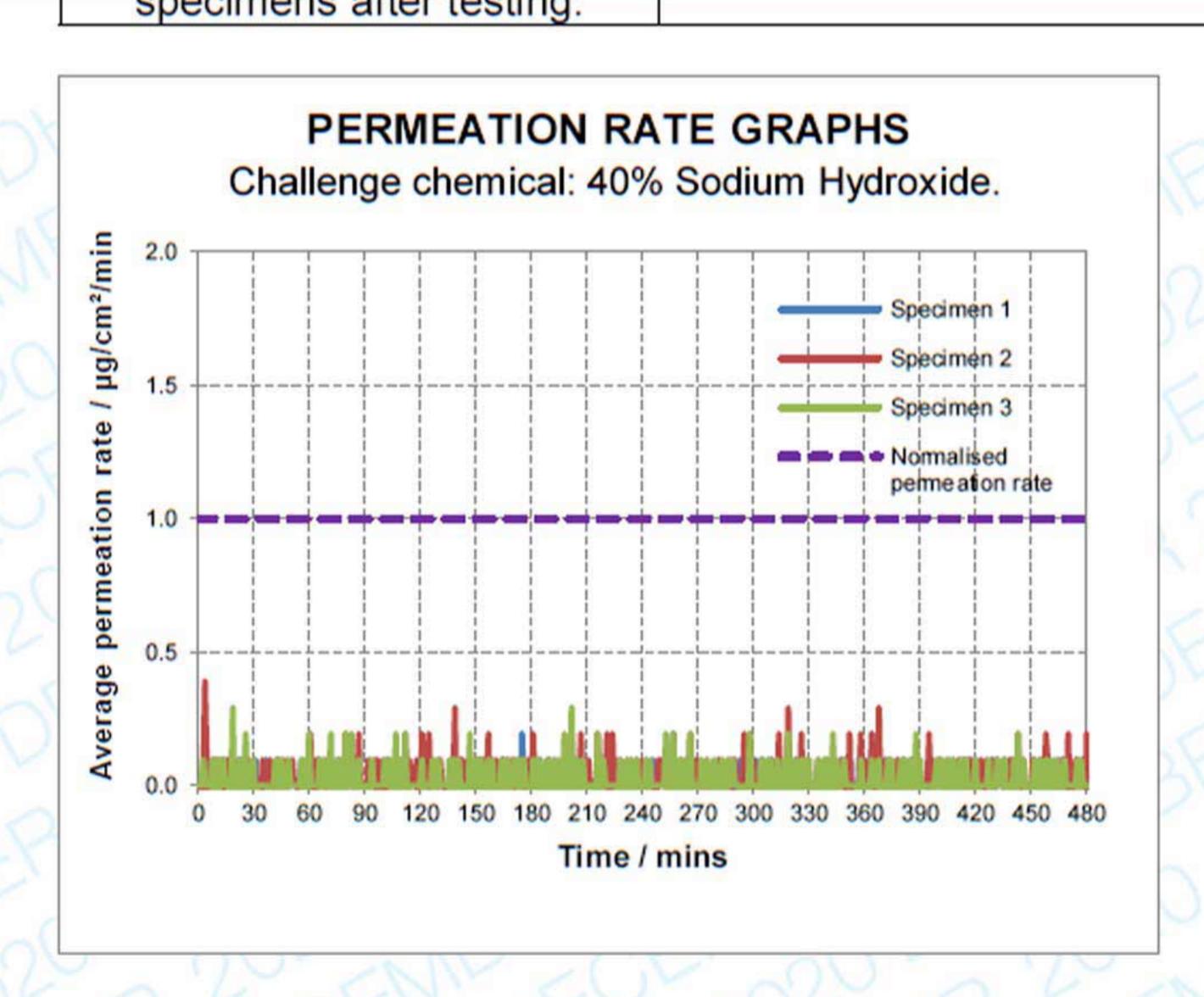
CHM0305368/2048/LC/A

(Page 3 of 6)





Test/Property	Sample reference:	Disposable Powder Fr Gloves, Color: Blue, Re RT	Performance	
		Chemical: 40%	Sodium hydroxide	
		Normalised permeation ra	ate (NPR): 1 µg/cm²/min	
EN 16523-1:2015	Test		Conductimetry ontinuous measurement)	
+A1:2018 in	information:	Collection medium: Deid	nised water (closed loop)	
accordance with SATRA		Collection medium stirring (each cell constant to within ±	4 7 - () 7 11 11 11 11 11	
SOP CAT-009		Test temperature:	(23 ± 1) °C	Level 6
Using PTFE	Specimen	Thickness (mm)△	Breakthrough time (mins)	
permeation cells	1	0.09	>480	
with standardised dimensions	2	0.09	>480	
uniterisions	3	0.09	>480	
		Test result:	>480	
		UoM:	<1	
Visual appe	earance of fter testing:		Discoloured	



○ EN 16523-1:2015+A1:2018 does not require the test specimen thicknesses to be reported, this information is indicative only.

SATRA Technology Services (Dongguan) Ltd SATRA Reference: CHM0305368/2048/LC/A

21st December 2020 Date:

(Page 4 of 6)



# **Test Report** EN ISO 374-2 / EN ISO 374-5



SATRA Technology Services (Dongguan) Ltd
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Nancheng District, Dongguan City
Guangdong Province, China
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email: info@satrafe.com

Customer details: Guangdong Kingfa Sci. & Tech. Co., Ltd

NO.28 Delong Avenue Shijiao Town

Qingcheng District
Qingyuan City
Guangdong Province

China

SATRA reference: CHT0305236 /2047

Your reference: KS-ST RT021

Date of report: 10 December 2020

Samples received: 20 November 2020

Date(s) work 23 November 2020 to carried out: 1 December 2020

# TECHNICAL REPORT

Subject:

EN ISO 21420: 2020 size & dexterity & innocuousness test, EN ISO 374-2: 2019 air leak and water leak, EN ISO 374-5: 2016 viruses test on Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Size: S (6), M (7), L (8), XL (9), Reference number: KS-ST RT021.

### Conditions of Issue:

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The uncertainty of the results (UoM) in this report is based on a standard uncertainty multiplied by a coverage factor k=2, which provides a coverage probability of approximately 95%.

Report signed by:
Position:
Department:

Adam Zhang Technologist China Testing

(Page 1 of 9)

Adam Zhang



### **WORK REQUESTED**

Samples described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Size: S (6), M (7), L (8), XL (9), Reference number: KS-ST RT021 were received by SATRA on 20 November 2020 for testing in accordance with EN ISO 21420: 2020, EN ISO 374-2: 2019 and EN ISO 374-5: 2016.

### SAMPLE SUBMITTED



Samples described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021

### TESTING REQUESTED

EN ISO 21420: 2020 Clause 5.1 - Sizing and measurement of gloves

EN ISO 21420: 2020 Clause 5.2 - Dexterity EN ISO 374-2: 2019 Clause 7.2 - Air leak

EN ISO 374-2: 2019 Clause 7.3 – Water leak

EN ISO 374-5: 2016 Clause 5.3 – Protection against viruses (ISO 16604: 2004 Procedure B)

EN ISO 21420: 2020 Clause 4.2 - Innocuousness of protective gloves

# CONCLUSION

The samples described as Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Size: S (6), M (7), L (8), XL (9), Reference number: KS-ST RT021 were found to achieve the following results:

EN ISO 21420: 2020 Clause 5.1 - See below table

EN ISO 21420: 2020 Clause 5.2 - Level 5

EN ISO 374-2: 2019 Clause 7.2 - Pass

EN ISO 374-2: 2019 Clause 7.3 - Pass

EN ISO 374-5: 2016 Clause 5.3 - Pass

EN ISO 21420: 2020 Clause 4.2 - Pass PAHs, DMFA and pH value

Detailed results are included on the following page(s)

Guangdong Kingfa Sci. & Tech. Co., Ltd SATRA Reference: CHT0305236 /2047

10 December 2020 Date:

(Page 2 of 9)

Adam Zhangzhang Signed: echnologist China Testing



# **Test Report** EN ISO 374-2 / EN ISO 374-5



# **Testing**

Testing was carried out in accordance with EN ISO 21420:2020, EN ISO 374-2: 2019.

Samples for testing were conditioned for at least 24 hours in a conditioned environment maintained at (23±2) °C and (50±5) % relative humidity.

# Requirements

Table 1 - Requirements for EN ISO 21420: 2020 Clause 5.2 Dexterity

Performance level	1	2	3	4	5
Diameter of dexterity pin /mm	11.0	9.5	8.0	6.5	5.0

Table 2 – Requirements for EN ISO 374-2: 2019

Clause 7.2 Air leak	No leak to be detected
Clause 7.3 Water leak	No leak to be detected

### **Test Results**

Table 3 – EN ISO 21420:2020 Test Results

Clause / Test	Requirement	1020 5FR	(See note ♣)	Result			
	722	- CANTO	FUY	ength /mn	100		EV
	NBIL	Size	122	2	3		20
MIBIEC ENVISOR	9	242	243	245		7	
	200	Comfortable on fit			YOK!		OF
5.1 Glove	MA	7 2	250	245	245		JER
length, comfort N/A and fit	N/A	Comfortable on fit			000	± 1.10 mm	N/A
	100	8	245	240	244		00
	BUCE	Comfortable on fit			CEN		06
	DE	9	247	245	240		CMI
JON 020 185	NBELL	Comfortable on fit			R		200
ER LEC	N. DE	Size	Minimun	n pin diame	eter / mm	2012	Z CX
5.2 Dexterity See t	722 NB	6		5.0	"DEL		3
	See table 1	7000		5.0	111	N/A	Level 5
	100	8		5.0	00 1		9
11,200,	000	9	1	5.0	10		~ ( )/

Guangdong Kingfa Sci. & Tech. Co., Ltd SATRA Reference: CHT0305236 /2047 10 December 2020 Date:

(Page 3 of 9)

Signed: Zhang **China Testing** 



### Table 4 - EN ISO 374-2: 2019 Test Results

Clause / Test	Test Res	UoM (See note ♣)	Result	
7.2 Air leak test	Total air pressure used Sample size 6 7 8 9	3.0 kPa Leaks No leaks detected	N/A	Pass
7.3 Water leak test	Sample size  6 7 8 9	Leaks No leaks detected	N/A	Pass

### Additional Information / Notes

Note ♣ – Estimated uncertainty of measurement applied at point of test (e.g. to applied force or to tolerance limits) to ensure product meets requirements of the standard

Guangdong Kingfa Sci. & Tech. Co., Ltd SATRA Reference: CHT0305236 /2047 10 December 2020 Date:

(Page 4 of 9)

Signed: **China Testing** 



# **Test Report** EN ISO 374-2 / EN ISO 374-5



# **Protection Against Viruses Test Results**

Testing was conducted at a third-party laboratory and reported under their reference 20R006813. The laboratory is CNAS accredited to ISO 17025: 2017 with ISO 16604: 2004 included in their accreditation schedule.

Table 1 – Resistance to penetration by blood-borne pathogens results

Sample desc	cription:	Disposable Powder Free Nitrile Examination Gloves, Color: Blue, Reference number: KS-ST RT021.					
Test method	Specimen	Step 1 (0 kPa, 5 min)	Step 2 (14 kPa, 1min)	Step 3 (0kPa, 4min)	Titre of phage Phi-X174 (PFU /mL)	Comment	
ISO 16604:	+ control	Penetration	Penetration	Penetration	Penetration	Acceptable	
2004	- control	No penetration	No penetration	No penetration	< 1	Acceptable	
Procedure B	1	Invisible penetrate	Invisible penetrate	Invisible penetrate	< 1	Pass	
Using retaining screen	2	Invisible penetrate	Invisible penetrate	Invisible penetrate	< 1	Pass	
	3	Invisible penetrate	Invisible penetrate	Invisible penetrate	< 1	Pass	

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(Page 5 of 9)

Adam Zhangz Signed: **Technologist China Testing** 



### Innocuousness Test Results

Testing was conducted at a third-party laboratory and reported under their reference A201123020001. The laboratory is CNAS accredited to ISO 17025: 2017.

Sample Item	Sample Description	Location	Style
1001	KS-ST RT021 Blue Disposable Powder Free Nitrile Examination Gloves	Gloves	7 \- \

### pH Value - EN ISO 21420:2020

With reference to EN ISO 4045:2018, analyzed by pH meter. Test Method I: With reference to ISO 3071:2020, analyzed by pH meter. Test Method II:

Requirement:	3.5-9.5
rto quii omone.	

	Unit	Result
Test Item(s)	-	I001
Test Method	=	
Parameter	_	
pH Value of Extracting Solution	_	5.50
Temp. of Aqueous Extract	deg. C	25.1
pH Value of Aqueous Extract	VE-111.	6.7  M
Difference Figure	JUM AC	MANUAL MA
Conclusion	- AND	PASS

deg. C = degree Celsius (°C) Temp. = Temperature Note / Key:

Result(s) was (were) reported the average value from two trials. Remark:

Tested part(s) was/were specified by client.

Guangdong Kingfa Sci. & Tech. Co., Ltd SATRA Reference: CHT0305236 /2047 10 December 2020 Date:

(Page 6 of 9)

Signed: **China Testing** 



# **Test Report** EN ISO 374-2 / EN ISO 374-5



### Polycyclic Aromatic Hydrocarbons (PAHs) Content - EN ISO 21420:2020

With reference to test method PD CEN ISO/TS 16190:2013 Test Method:

Maximum Allowable Each of all listed PAHs: 1.0 mg/kg Limit:

Tooks diltom(a)		Result			
Tested Item(s)	Detected Analyte(s)	Conc.	Unit	Conclusion	
1001	ND	ND	mg/kg	PASS	

Note / Key: ND = Not detected(<Detection Limit) Detection Limit (mg/kg): Each: 0.2;

mg/kg = milligram per kilogram = ppm = part per million

The list of polycyclic aromatic hyrdocarbons is summarized in table of Appendix. Remark:

Tested part(s) was/were specified by client.

APPENDIX List of Polynuclear Aromatic Hydrocarbons:								
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.			
1	Chrysene	218-01-9	5	Dibenzo (a,h) anthracene	53-70-3			
2	Benzo (a) pyrene	50-32-8	6	Benzo (b) fluoranthene	205-99-2			
3	Benzo (e) pyrene	192-97-2	7	Benzo (j) fluoranthene	205-82-3			
4	Benzo (a) anthracene	56-55-3	8	Benzo (k) fluoranthene	207-08-9			

### Dimethylformamide(DMFA) Content - EN ISO 21420:2020

With reference to EN 16778:2016, and then analyzed by Gas Chromatograph Mass Spectrometer. Test Method:

CENTO	320	Result	-IND	
Analyte	Unit	Test Item(s)	Client's Requirement	
	2007	201 1001	200	
Dimethylformamide(DMFA)	mg/kg	ND ND	1000	
Conclusion	- WIL	PASS	0K-00	

Note / Key: ND = Not detected (<Detection Limit) Detection Limit (mg/kg): 5

mg/kg = milligram per kilogram = ppm = part per million

\*\*\* End of Report \*\*\*

Guangdong Kingfa Sci. & Tech. Co., Ltd SATRA Reference: CHT0305236 /2047 Date:

10 December 2020

(Page 7 of 9)

Signed: Zhangzhane Pechnologist **China Testing** 

# EN ISO 374-1 / EN ISO 374-2 / EN 374-4





Oct 27, 2020

Number:

Date:

Applicant: GUANGDONG KINGFA SCI.&TECH.CO.,LTD.

NO.28 DELONG AVENUE, SHIJIAO TOWN, QINGCHENG DISTRICT, QINGYUAN CITY,

GUANGDONG PROVINCE, CHINA

XIAOGE YU Attn:

Sample Description:

Two Hundred (200) pairs of submitted samples protective gloves in Blue.

Standard BS EN ISO 21420:2020 / ISO 21420:2020

EN ISO 374-1:2016+A1:2018

EN ISO 374-2:2019 EN 16523-1:2015+A1:2018

BS EN 374-4:2013 / EN 374-4:2013

Ref. No. KS-ST RT021

Colors

M/L Size Range

Manufacturer GUANGDONG KINGFA SCI.&TECH.CO.,LTD.

Ref. Palm Nitrile Nitrile Back Cuff **Nitrile** Cuff Binding Nitrile Lining Nitrile Country Of Origin China Goods Exported To

Date Received/Date Test Started: Oct 16, 2020

Date Final Information Confirmed/

Date Payment Received:

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at <a href="mailto:gzfootwear@intertek.com">gzfootwear@intertek.com</a>

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

**Guiliang Dong** 

Senior Lab Manager

Vi vian L

Vivian Li

Senior Technical Specialist

/ kayyu

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

深圳天祥质量技术服务有限公司产业公司

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Page 1 Of 11



# **Test Report** EN ISO 374-1 / EN ISO 374-2 / EN 374-4



Total Quality. Assured. TEST REPORT

Tests Conducted (As Requested By The Applicant)





中国认可 国际互认 检测 TESTING **CNAS L0220** 

GZHT90996854 Number:

Glove Design And Construction - General (BS EN ISO 21420:2020 / ISO 21420:2020, 4.1)

Requirement	Yes	No	N/A
The Protective Glove Shall Be Designed And Manufactured So That In The	X		
Foreseeable Conditions Of Use, The Wearer Can Perform The Activity As			
Normally As Possible With An Appropriate Protection. This Document Along With			
The Appropriate Specific Standards Shall Be Used To Verify This Adequation.			
If Required In The Relevant Specific Standard (For Example ISO 16073:2011,	X		
5.7.3), The Glove Shall Be Designed To Minimize The Donning And Doffing Time.			
For Reusable Multilayer Gloves, The Gloves Shall Be Able To Doffed Without			X
Separation Of The Layers Of The Fingers. 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 As Required In The			
Relevant Specific Standards.			·

Dexterity (BS EN ISO 21420:2020 / ISO 21420:2020, 6.2)

The Smallest Diameter Of Pin Picked Up

Specimen 1(Left Hand): 5 mm Specimen 2(Right Hand): 5 mm Specimen 3(Left Hand): 5 mm Specimen 4(Right Hand): 5 mm Performance Level: 5 (\*)

The Classification Is Determined By The Smallest Diameter Of Pin Picked Up Of The Four Remark:

Test Specimens.

# Remark:

Level Of Performance	Smallest Diameter Of Pin Fulfilling Test Conditions
Level 1	11 mm
Level 2	9.5 mm
Level 3	8 mm
Level 4	6.5 mm
Level 5	5 mm

/ kayyu

Page 2 Of 11

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Economic & Technological Development District, Guangzhou,

3/F., Hengyun Building, 235 Kaifa Ave., Guangzhou



中国认可国际互认检测 TESTING CNAS L0220

GZHT90996854

Number:

TEST REPORT
Tests Conducted (As Requested By The Applicant)

3 Glove Length (BS EN ISO 21420:2020 / ISO 21420:2020, 6.1)

Size M

Specimen 1 Glove Length: 242 mm
Specimen 2 Glove Length: 243 mm
Specimen 3 Glove Length: 243 mm

Size L

Specimen 1 Glove Length: 241 mm
Specimen 2 Glove Length: 243 mm
Glove Length: 245 mm

4 Air Leak Test (EN ISO 374-2:2019, 7.2)

Test Air Pressure: 2.5 kPa

Sample	Specimen	1	2	3	4	Requirement	Pass/Fail
	Examination	No Tears,	No Tears,	No Tears,	No Tears,		
	Before Test:	Rips And	Rips And	Rips And	Rips And	*	Pass
		Holes On	Holes On	Holes On	Holes On		
		The Glove.	The Glove.	The Glove.	The Glove.		
	Observation	No Leakage	No Leakage	No Leakage	No Leakage		
	After	Of Air.	Of Air.	Of Air.	Of Air.	*1	Pass
	30 Seconds:						

Remark: \* = There Shall Be No Tears, Rips And Holes On The Glove.

\*1 = There Shall Be No Leakage Of Air.

### 5 Water Leak Test (EN ISO 374-2:2019, 7.3)

Sample	Specimen	1	2	3	4	Requirement	Pass/Fail
-	Examination	No Tears,	No Tears,	No Tears,	No Tears,		
	Before Test:	Rips And	Rips And	Rips And	Rips And	*	Pass
		Holes On	Holes On	Holes On	Holes On		
		The Glove.	The Glove.	The Glove.	The Glove.		
	Observation	No Leakage	No Leakage	No Leakage	No Leakage		
	After 2	Of Water.	Of Water.	Of Water.	Of Water.	*1	Pass
	Minutes:						

Remark: \* = There Shall Be No Tears, Rips And Holes On The Glove.

\*1 = There Shall Be No Leakage Of Water.

/ kayyu

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Page 3 Of 11

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Economic & Technological Development District, Guangzhou,



# **Test Report** EN ISO 374-1 / EN ISO 374-2 / EN 374-4



Total Quality. Assured. TEST REPORT

Tests Conducted (As Requested By The Applicant)



Number: GZHT90996854

Marking (EN ISO 374-1:2016+A1:2018(E), 6) 6

Protective Gloves Against Dangerous Chemicals Shall Be Marked In Accordance With The Requirements For Protective Gloves In EN 420 And With The Following.

	Requirements	Pass	Fail	N/A
EN 420	2003+A1:2009, 7.2.1 Glove Marking			
7.2.1.1	Each Protective Glove Shall Be Marked With The Following Information:			
a)	Name, Trade Mark Or Other Means Of Identification Of Manufacturer Or His Authorized Representative;	X		
b)	Glove Designation (Commercial Name Or Code Allowing The User To Identify Clearly The Product Within The Manufacturer's / Authorized Representative's Range);	X		
c)	Size Designation;	X		
d)	If Relevant, Marking According 7.2.3 Date Of Obsolescence:  If The Protective Performances Of The Glove Can Be Significantly Affected By Ageing, i.e. One Or More Performance Levels Are Reduced Within A Year After Glove Production And Before Use, A Date Of Obsolescence Shall Be Indicated On Gloves And Packaging.	X		
e)	Where The Glove Conforms To One Or More Specific European Standards, The Pictogram(s) Appropriate To The Standard(s). Each Pictogram Shall Be Accompanied By The Reference Of The Applicable Specific Standard And Performance Levels, Which Shall Always Be In The Same Fixed Sequence As Defined In The Corresponding Standard.	X		
7.2.1.2	The Marking Shall Be Affixed So As To Be Visible, Legible And Indelible Throughout The Foreseeable Useful Life Of The Glove. Marks Or Inscriptions Which Could Be Confused With The Above Marks Shall Not Be Affixed To The Glove.			X
7.2.1.3	If Marking On The Glove Is Not Possible In View Of The Characteristics Of The Product, The Marking Shall Be Affixed To The Packaging.	X		
7.2.1.4	A Pictogram Shall Only Be Used When The Glove Meets At Least The Minimum Requirement Of The Relevant Specific Standard. It Shall Be Made Clear That Complementary Information Must Also Be Read, By Adding An I Standing For Information Along With The Series Of Pictograms.	X		

Page 4 Of 11 / kayyu

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Tests Conducted (As Requested By The Applicant)

Marking (EN ISO 374-1:2016+A1:2018(E), 6) (Cont)

Requirements	Pass	Fail	N/A
EN ISO 374-1:2016+A1:2018, 6.1 Marking Of Type A Gloves			
For Protective Gloves Complying With The Type A Requirements Stated In 5.5, The			X
Pictograms In Figure 2 Shall Be Used With Reference To This Part Of ISO 374.			
The Six Tested Chemicals Shall Be Identified By Their Code Letter Which Shall Be			
Marked Under The Pictogram As Shown In Figure 2. If Other Chemicals Not Present In			
The List Have Been Tested, Information About The Performance Levels Shall Be			
Provided In The User Instructions.			
EN ISO 374-1:2016+A1:2018, 6.2 Marking Of Type B Gloves			
For Protective Gloves Complying With The Type B Requirements Stated In 5.5, The			X
Pictograms In Figure 3 Shall Be Used With Reference To This Part Of ISO 374.			
The Three Tested Chemicals Shall Be Identified By Their Code Letter Which Shall Be			
Marked Under The Pictogram As Shown In Figure 3. If Other Chemicals Not Present In			
The List Have Been Tested, Information About The Performance Levels Shall Be			
Provided In The User Instructions.			
EN ISO 374-1:2016+A1:2018, 6.3 Marking Of Type C Gloves			
For Protective Gloves Complying With The Type C Requirements Stated In 5.5, The	X		
Pictograms In Figure 4 Shall Be Used With Reference To This Part Of ISO 374.			
The Tested Chemical(s) Shall Be Given In The User Instructions With Information About			
Its Performance Levels. If Other Chemicals Not Present In The List Have Been Tested,			
Information About The Performance Levels Shall Be Provided In The User Instructions.			

The Submitted Sample MEETS The Requirements Of EN ISO 374-1:2016+A1:2018 Clause 6 Compliance:

For Marking.

kayyu

Page 5 Of 11

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Economic & Technological Development District, Guangzhou,



# **Test Report** EN ISO 374-1 / EN ISO 374-2 / EN 374-4



中国认可国际互认检测 TESTING CNAS L0220

Number:

GZHT90996854

Tests Conducted (As Requested By The Applicant)

Information Supplied By The Manufacturer (EN ISO 374-1:2016+A1:2018, 7)

The Information Supplied By The Manufacturer Shall Be In Accordance With The Requirements For Information As Defined In EN 420.

	Requirements	Pass	Fail	N/A
EN 420	:2003+A1:2009, 7.3			
The Foll	owing Minimum Information Shall Be Supplied When The Protective Glove Is Place	ed On T	he Mar	ket,
And Sha	all Be Maintained Available.	_		
7.3.1	Name And Full Address Of The Manufacturer Or Authorized Representative.	X		
7.3.2	Glove Designation As Per 7.2.1.1 b).	X		
7.3.3	In Formation On The Available Size Range And Where Applicable, Information Required In 5.1.	X		
7.3.4	The Intended Use Of The Glove And Reference To The Relevant Specific Standard(s) And Publication Year.	X		
7.3.5	Where Applicable As Per 7.2.1.1 d) And 7.2.2 e), Pictogram(s) Indicating Categories Of Hazard Followed As Applicable By The Performance Levels.  0: Indicates That The Glove Falls Below The Minimum Performance Level For The Given Individual Hazard.  X: Indicates That The Glove Has Not Been Tested Or The Test Method Appears Not To Be Suitable For The Glove Design Or Material.  Furthermore, A Basic Explanation Shall Be Given To Assist Comprehension Of The Relevant Performance Levels, And The Standard(s) To Which They Refer Shall Be Indicated. The Reason(s) To Use "X" Shall Be Explained.  Performance Level Shall Be In The Same Order As Given Within The Relevant Specific Standard. They May Be Positioned Anywhere Next To The Pictogram Provided That They Are In Clear Relation With It.	X		
7.3.6	When Protection Is Limited To Part Of The Hand Only, This Shall Be Mentioned.	X		
7.3.7	If Appropriate, Warnings Against Problems Likely To Be Encountered Or Limitation Of Use Shall Be Mentioned. As An Example, A Warning Could Be Given About The Use Of Tear Resistant Gloves Used In Close Proximity Of Rotating Machinery.			X
7.3.8	If The Materials Constituting The Gloves Are Known To Lose Their Performances During Recommended Storage, Information Shall Be Given To Ensure That The Storage Will Not Change The Glove Characteristics Significantly.	X		
7.3.9	If It Is Known That The Design Performance Of The Glove May Be Significantly Affected By Ageing, The Necessary Information To Establish A Reasonable Obsolescence Date As Requested In 7.2.1.1 f) Shall Be Given.	X		
7.3.10	A Warning For Glove Containing Any Natural Rubber, Such As: "The Glove Contains Natural Rubber Which May Cause Allergic Reactions".			X

kayyu Page 6 Of 11

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Tests Conducted (As Requested By The Applicant)

Information Supplied By The Manufacturer (EN ISO 374-1:2016+A1:2018, 7) (Cont)

The Information Supplied By The Manufacturer Shall Be In Accordance With The Requirements For Information As Defined In EN 420.

	Requirements	Pass	Fail	N/A
EN 420	:2003+A1:2009, 7.3			
7.3.11	Instructions Relevant To Donning, Doffing, Adjusting The Gloves, Preserving Comfort And Hygiene Of The Hand, Protection From Contamination Of The Hand, And Where Relevant Information Concerning Combination With Other Forms Of PPE.	X		
7.3.12	Any Relevant Instruction To Check The Integrity Of The Glove Before Using It (For Example Check That The Glove Does Not Present Holes, Cracks, Tears, Colour Change, And Discard Any Glove Presenting Such Defects).	X		
7.3.13	Storage Instructions.	X		
7.3.14	If Cleaning According To 4.3 Is Claimed, Care Symbols According To Iso 3758 Or Explanations And An Acceptable Number Of Cleaning Cycles, Shall Be Provided. If Cleaning Is Not Recommended, It Shall Be Indicated That The Glove Is Not Washable. This Excludes Single-Use Gloves.			X
7.3.15	If Relevant, Test Results According To 4.4 Along With Reference Of Corresponding Standard, Atmosphere For Testing, Area Of The Glove Tested And Test Method/Electrode Used And The Voltage Applied As Per The Relevant Standard. Moreover, A Written Warning Shall Be Provided To Advise That All Clothing And Shoes Worn With This Type Of Glove Shall Also Be Designed Taking The Electrostatic Risk Into Account.			X
7.3.16	Reference To Accessories And Spare Parts, If Relevant, For Example Connection Systems Between Sleeve And Glove.			X
7.3.17	Type Of Packaging Suitable For Transport, If Relevant.	X		

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Page 7 Of 11

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Economic & Technological Development District, Guangzhou,



# **Test Report** EN ISO 374-1 / EN ISO 374-2 / EN 374-4



Total Quality. Assured.
TEST REPORT

Tests Conducted (As Requested By The Applicant)



Number: GZHT90996854

Information Supplied By The Manufacturer (EN ISO 374-1:2016+A1:2018, 7) (Cont)

The Information Supplied By The Manufacturer Shall Be In Accordance With The Requirements For Information As Defined In EN 420.

Requirements	Pass	Fail	N/A
EN ISO 374-1:2016+A1:2018, 7			
It shall also include the results of 5.2 (Penetration), 5.3 (Degradation), 5.4	X		
(Permeation), the list of all the chemicals to which the protective gloves have			
been tested and the performance levels obtained in permeation testing.			
The following warnings shall be added in the user instructions:			
"This information does not reflect the actual duration of protection in the workplace and	X		
the differentiation between mixtures and pure chemicals."			
"The chemical resistance has been assessed under laboratory conditions from samples	X		
taken from the palm only (except in cases where the glove is equal to or over 400 mm -			
where the cuff is tested also) and relates only to the chemical tested. It can be different			
if the chemical is used in a mixture."			
"It is recommended to check that the gloves are suitable for the intended use because	X		
the conditions at the workplace may differ from the type test depending on temperature,			
abrasion and degradation."			
"When used, protective gloves may provide less resistance to the dangerous chemical	X		
due to changes in physical properties. Movements, snagging, rubbing, degradation			
caused by the chemical contact etc. may reduce the actual use time significantly. For			
corrosive chemicals, degradation can be the most important factor to consider in			
selection of chemical resistant gloves"			
"Before usage, inspect the gloves for any defect or imperfections."	X		
For reusable gloves, the manufacturer shall provide the relevant instructions for			X
decontamination.			
If there is no information about decontamination, then it is intended for single use only	X		
and the following warning shall be added: "For single use only".			

**Compliance:** The Submitted Sample **MEETS** The Requirements Of EN ISO 374-1:2016+A1:2018 Clause 7 For Information Supplied By The Manufacturer.

/ kayyu

Page 8 Of 11

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技术服务有限公司产业公司

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Tests Conducted (As Requested By The Applicant)

8 Resistance To Degradation By Chemicals (BS EN 374-4:2013 / EN 374-4:2013)

Specimens Condition: 23℃, 50% r.h. For 24 Hours
Treatment Of Test Specimens: No Treatment As No Liner Present

Test Chemical Used: Sodium Hydroxide 40%

Sample	Results				
	Degradation Observations				
-	DR1 +24.3%		After Test, Test Specimens Showed No Visible Damage		
	DR2	+20.1%	After Test, Test Specimens Showed No Visible Damage		
	DR3	+37.3%	After Test, Test Specimens Showed No Visible Damage		
	DR	+27.2%			

Remark: (+) Means Puncture Resistance Property Gets Worse.

DR= The Degradation Of The Test Sample Against Challenge Chemical Tested.

DR1= The Degradation Of The First Glove Specimen Against Challenge Chemical Tested.

DR2= The Degradation Of The Second Glove Specimen Against Challenge Chemical Tested.

DR3= The Degradation Of The Third Glove Specimen Against Challenge Chemical Tested.

9 Chemical Protective Clothing, Glove And Footwear Against Permeation Per EN 16523-1:2015+A1:2018

Tested Component	Results	Level	Break Through Time	Performance
	Thickness: 0.11 mm			
Nitrile Protective				
Gloves In Blue	Permeation	2	> 10 Mins	1
	Breakthrough Time:		> 30 Mins	2
	>30 Mins			
	Chemical: 40% Sodium Hydroxide			
	Appearance: No Obvious Change			

/ kayyu

Page 9 Of 11

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### **Test Report** EN ISO 374-1 / EN ISO 374-2 / EN 374-4



Total Quality. Assured. TEST REPORT

Tests Conducted (As Requested By The Applicant)



GZHT90996854

Number:

Polycyclic Aromatic Hydrocarbons (PAH) Content:

As Per ISO/TS 16190:2013, By Solvent Extraction And Determined By Gas Chromatography - Mass Spectrometry (GC/MS)

No.	Tested Compound	CAS No.	Result (mg/kg)	Requirement (mg/kg)
1.	Benzo[a]pyrene (BaP)	50-32-8	ND	1.0
2.	Benzo[e]pyrene (BeP)	192-97-2	ND	1.0
3.	Benzo[a]anthracene (BaA)	56-55-3	ND	1.0
4.	Chrysene (CHR)	218-01-9	ND	1.0
5.	Benzo[b]fluoranthene (BbFA)	205-99-2	ND	1.0
6.	Benzo[j]fluoranthene (BjFA)	205-82-3	ND	1.0
7.	Benzo[k]fluoranthene (BkFA)	207-08-9	ND	1.0
8.	Dibenzo[a,h]anthracene (DBAhA)	53-70-3	ND	1.0

Remark: ND = Not Detected

Detection Limit = 0.2 mg/kg

Tested Component: Nitrile Protective Gloves In Blue

Conclusion:

Standard

Result Pass

BS EN ISO 21420:2020 Protective Gloves - General

Requirements And Test Methods - Polycyclic Aromatic Hydrocarbons (PAH) Content

pH Value

AS Per BS EN ISO 21420:2020, 4.2, With Reference To BS EN ISO 3071:2020 For Textile, Potassium Chloride (KCI) Solution Extracted, pH Value Was Measured By pH Meter.

Result	Requirement
6.6	*

Temperature Of The Extracting Solution: 23.5℃

pH Of The Extracting Solution: 5.80

Remark: \* = The pH Value Shall Be Greater Than 3.5 And Less Than 9.5

Tested Component: Nitrile Protective Gloves In Blue

Conclusion:

Standard BS EN ISO 21420:2020 For pH Value Result Pass

kayyu

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Page 10 Of 11

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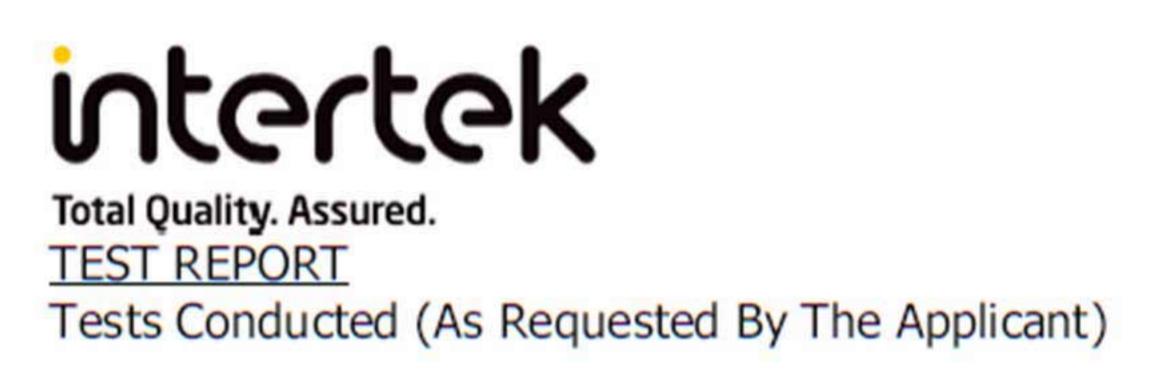
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Number: GZHT90996854



End Of Report

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/ kayyu

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Economic & Technological Development District, Guangzhou,



Test Report No.: 68.431.20.0384.01

Dated: 2021-01-08



Applicant : GUANGDONG KINGFA SCI.&TECH. CO., LTD.

NO.28 Delong Avenue, Shijiao Town, Qingcheng District,

Qingyuan City, Guangdong Province, China

Sample Description : Nitrile gloves

Style No. / Name / Design No. : KS-ST RT021

Supplier/Manufacturer : GUANGDONG KINGFA SCI.&TECH. CO., LTD.

Test Sample Receipt Date, Location : 2020-12-07, Shenzhen

Test Period, Location : From 2020-12-07 to 2021-01-06, Shenzhen

Test Result(s) : Refer to Section 3

Test Report No.: 68.431.20.0384.01

Dated: 2021-01-08



#### Purpose Of Examination / Conclusion:

Test Requested: As specified by client, to test per the selected requirement(s) for the tested item(s) as stated in the Regulation (EC) No.1935/2004

No.	Test Item(s)	Conclusion
1.	Overall Migration	Pass
2	Specific Migration of PAA	Pass
3	Specific Migration of Phthalates	Pass
4	Specific Migration of Butadiene (BU)	Pass
5	Phthalates Test	Pass
6	N-Nitrosamines and N-Nitrosatable substances Content	Pass

#### Remarks:

- (1) The results relate only to the items tested.
- (2) Samples are tested as received.
- (3) The test item and samples were specified by the client
- (4) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expended uncertainty for "Pass", "Fail" and "Inconclusive" is 95%.

TüV SüD Certification and Testing (China) Co., Ltd. Shenzhen Branch TüV SüD Group

Prepared by:

Reviewed by:

Hailey Tan
Project Engineer

Angelina Wang Supervisor

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Page 2 of 7



Test Report No.: 68.431.20.0384.01

Dated: 2021-01-08

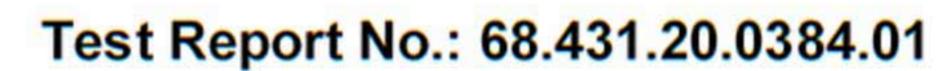


### 1. Description of the Test Sample:

Sample Description	Nitrile gloves

### 2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Blue gloves (Rubber)	NOTE AND THE SECTION OF THE PROPERTY OF THE SECTION



Dated: 2021-01-08



#### Test Result

### 3.1 Overall Migration

Test method: As specified in Regulation (EU) No. 10/2011 ANNEX III and V then test with reference to:

EN 1186-1:2002(Guide to the selection of conditions and test methods for overall migration)

EN 1186-2:2002(Oil by Total Immersion method)

EN 1186-3:2002(Total Immersion method)

	TEST	RESULT [mg/dm <sup>2</sup> ]	MAXIMUM PERMISSIBLE LIMIT [mg/dm²]	
SIMULANT USED	CONDITIONS	SAMPLE 001		
3% Acetic acid	40 °C for 0.5 Hour	<3.0	<10	
10% Ethanol	40 °C for 0.5 Hour	4.1	<10	
Rectified olive oil	40 °C for 0.5 Hour	<3.0	<10	

Note 1. "°C" denotes degree Celsius

- 2. "<" denotes less than
- 3. "mg/dm²" denotes milligram per square decimeter
- 4. The specification was quoted from Regulation (EU) No. 10/2011

### 3.2 Specific Migration of PAA

Test method: With reference to EN 1186-1: 2002.follow by UV spectrophotometer

Test Conditions: 3% Acetic Acid: 40 °C for 0.5 Hour

	RESULT [mg/kg foodstuff]	MAXIMUM
TESTITEM	SAMPLE 001	PERMISSIBLE LIMIT [mg/kg foodstuff]
Primary Aromatic Amine	< 0.01	<0.01
Conclusion	Pass	-

Note 1. "°C denotes degree Celsius

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram
- 4. The specification was quoted from Regulation (EU) No. 10/2011

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Test Report No.: 68.431.20.0384.01

Dated: 2021-01-08



#### 3.3 Specific Migration of Phthalates

Test method: As specified in Regulation (EU) No. 10/2011 ANNEX III and V, and followed by gas chromatography/Mass Spectrometry (GC-MS) analysis.

Test Conditions: 95% Ethanol: 40 °C for 0.5 Hour

	RESULTS [mg/kg foodstuff]	PERMISSIBLE LIMIT [mg/kg foodstuff]	
TESTITEM	SAMPLE 001		
Dibutyl phthalate (DBP)	< 0.30	0.3	
benzyl butyl phthalate (BBP)	<1.0	30	
Bis (2-ethylhexyl) phthalate (DEHP)	< 0.30	1.5	
adipic acid, bis(2-ethylhexyl) ester (DEHA)	<1.0	18	
Bis(2-Ethylhexyl) Terephthalate (DEHTP)	<1.0	60	
DINP+DIDP .	<2.0	9	
Conclusion	Pass	_	

### Note:

1. "mg/kg" denotes milligram per kilogram

2. "<" denotes less than



Dated: 2021-01-08



### 3.4 Specific Migration of Butadiene (BU)

Test method: As specified in Regulation (EU) No. 10/2011 ANNEX III and V, and followed by gas chromatography/Mass Spectrometry (GC-MS) analysis.

Test Conditions: 3% Acetic Acid: 40 °C for 0.5 Hour

	RESULT [mg/kg foodstuff]	MAXIMUM	
TESTITEM	SAMPLE 001	PERMISSIBLE LIMIT [mg/kg foodstuff]	
Butadiene	< 0.01	< 0.01	
Conclusion	Pass	-	

Note 1. "°C denotes degree Celsius

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram

### 3.5 Phthalates Test

Solvent extraction in chloroform, followed by GC-MS [Reporting Limit = 0.005%]

Test Items	CAS No.	Results [%]	Limit FO/1	
restitems	CAS NO.	Sample 001	Limit [%]	
Benzyl butyl Phthalate, (BBP)	85-68-7	< 0.005	<0.1	
Di-isodecyl Phthalate, (DIDP)	26761-40-0 , 68515-49-1	<0.005	<0.1	
Bis (2-ethylhexyl) Phthalate, (DEHP)	117-81-7	< 0.005	<0.1	
Di-isononyl Phthalate, (DINP)	28553-12-0 , 68515-48-0	<0.005	<0.1	
Di-n-butyl Phthalate, (DnBP)	84-74-2	< 0.005	<0.05	
Conclusion		Pass	-	

Note 1. "<" denotes less than

- 2. "%" denotes percent by weight
- 3. The specification was quoted from Regulation (EU) No. 10/2011

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Test Report No.: 68.431.20.0384.01

Dated: 2021-01-08



#### 3.6 N-Nitrosamines and N-Nitrosatable substances Content

Test Method: As per EN12868:2017, analyzed by high performance liquid chromatography with mass spectrometer detector (HPLC-MS-MS)

Test Conditions: 40 °C for 24 Hours

Test Item	CAS No.	RESULT [mg/kg] Sample 001	
		N-Nitrosodimethylamine (NDMA)	62-75-9
N-Nitrosodiethylamine (NDEA)	55-18-5	<0.01	<0.1
N-Nitrosodipropylamine (NDPA)	621-64-7	< 0.01	<0.1
N-nitrosodibutylamine (NDBA)	924-16-3	< 0.01	<0.1
N-nitrosodiisnonylamine (NDiNA)	1207995-62-7	< 0.01	<0.1
N-nitrosomorpholine (NMOR)	59-89-2	< 0.01	<0.1
N-nitrosopiperidine (NPIP)	100-75-4	<0.01	<0.1
N-nitrosodibenzylamine (NDBzA)	5336-53-8	< 0.01	<0.1
N-nitroso N-ethyl N-phenylamine (NEPhA)	612-64-6	<0.01	<0.1
NPYR+NMPhA	-	<0.01	<0.1
Sum of above		< 0.01	<0.1
Limit		< 0.01	<0.1

### Note:

1. "mg/L" denotes milligram per litre

2. "<" denotes less than

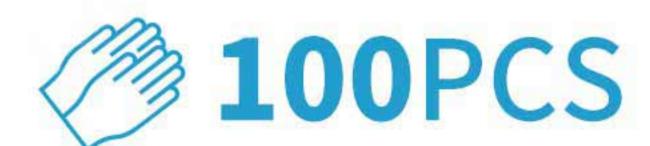
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### PACKING INFORMATION

Box

Size:220\*125\*68mm

Gross weight:390±10g





Carton

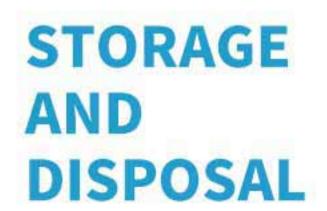
10 boxs/carton

Size:365\*235\*270mm

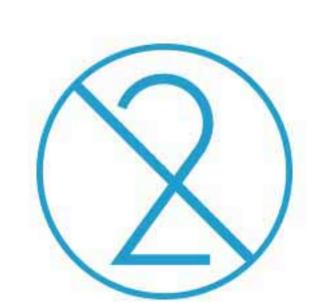
Gross weight:4470±500g



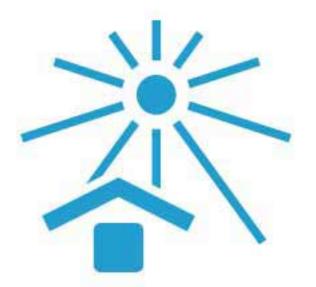
















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