



December 3, 2022

Safeskin Retailing (HK) Limited  
% Stephan Toupan  
President  
Dawa Medical LLC  
7320 NW 12th Street Suite 103  
Miami, Florida 33126

Re: K222713

Trade/Device Name: White Nitrile Powder Free Patient Examination Glove, Non Sterile  
Regulation Number: 21 CFR 880.6250  
Regulation Name: Non-Powdered Patient Examination Glove  
Regulatory Class: Class I, reserved  
Product Code: LZA  
Dated: September 5, 2022  
Received: September 8, 2022

Dear Stephan Toupan:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email ([DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

  
**Bifeng Qian -S**

Bifeng Qian, M.D., Ph.D.

Assistant Director

DHT4B: Division of Infection Control  
and Plastic Surgery Devices

OHT4: Office of Surgical  
and Infection Control Devices

Office of Product Evaluation and Quality  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K222713

Device Name  
WHITE NITRILE POWDER-FREE PATIENT EXAMINATION GLOVE, NON STERILE

Indications for Use (Describe)

A nitrile patient examination glove is a disposable device made of nitrile rubber intended for medical purposes that is worn on the examiner's hand or finger to prevent contamination between patient and examiner

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

### CONTINUE ON A SEPARATE PAGE IF NEEDED.

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# **K222713**

## **510K Summary**

**Trade Name :** White Nitrile Powder-free Patient

Examination Glove, Non-Sterile

**1.0 Submitter:**

Name : Alvin Ho  
Address : Safeskin Retailing (HK) Limited  
26<sup>th</sup> Floor, Beautiful Group Tower, 77 Connaught Road  
Central, Hong Kong  
Phone No. : +6012 826 5625  
Date of Summary Prepared : 8/1/2022

**2.0 Identification of the subject device:**

Trade Name: : White Nitrile Powder-Free Patient Examination Glove, Non-Sterile  
Common Name: : Patient Examination Gloves  
Classification Name : : Patient Examination Gloves  
Device Classification : : 1  
Regulation Number : : 21 CFR 880.6250  
Product Code : : LZA

**3.0 Predicate Device:**

**K171615**

Xingyu Nitrile Powder Free Patient Examination Gloves, White Color  
Company: Shandong Xingyu Gloves Co., Ltd

**4.0 Description of The Subject Device:**

White Nitrile Powder-Free Patient Examination Glove, Non-Sterile is manufactured from nitrile rubber. Innersurface of gloves undergoes surface treatment process to produce a smooth surface that assists the user in donning the gloves with ease without using any lubricant such as powder or silicone on the glove surface. The glove is ambidextrous, i.e., can be worn on right or left hand.

**5.0 Indication for use:**

A Nitrile patient examination glove is a disposable device intended for medical purposes that is worn on the examiner's hand or finger to prevent contamination between patient and examiner.

**6.0 Comparison of the Technological Characteristics of the Device:**

The White Nitrile Powder-Free Patient Examination Gloves, Non-Sterile are summarized with the following technological characteristics compared to ASTM D6319 or equivalent standards as shown in Table 1

**Table 1**

CHARACTERISTICS	STANDARDS	DEVICE PERFORMANCE		COMPARISON ANALYSIS
		PREDICATE	CURRENT	
		WHITE	WHITE	
510(k) Number	-	K171615	K222713	
Manufacturer(s)	-	Shandong Xingyu Gloves Co., Ltd	Safeskin Retailing (HK) Limited	
Material	ASTM D6319	Nitrile	Nitrile	Same
Color	-	White	White	Same
Sterility	-	Non-Sterile	Non-Sterile	Same
Handedness	-	Ambidextrous	Ambidextrous	Same
Physical Properties  <u>Before Aging</u> Tensile Strength: Ultimate Elongation:  <u>After Aging</u> Tensile Strength: Ultimate Elongation:	ASTM D6319	18-25Mpa 560-600%  17-21Mpa 460-560%	28.1– 32.9 Mpa 530 - 600%  30.8 – 35.9 Mpa 460 – 560%	Different but within the ASTM standard  Different but within the ASTM standard
Thickness: - Finger - Palm	ASTM D6319	0.08mm 0.08mm	Min 0.09mm for (XS, S, M, L XL) Min 0.06mm for (XS, S, M, L, XL)	Different but within the ASTM standard
Powder Free	ASTM D6124	Below 2mg of residual powder	Below 2mg of residual powder	Same

CHARACTERISTICS	STANDARDS	DEVICE PERFORMANCE		COMPARISON ANALYSIS
		PREDICATE	CURRENT	
		WHITE	WHITE	
Biocompatibility	Primary Skin Irritation – ISO 10993-10:2010 (E) & Consumer Product Safety Commission Title 16, Chapter II, Part 1500	Under the conditions of this study, the test article was a non-irritant or non-sensitizer.  SKIN IRRITATION DERMAL and SENSITIZATION STUDIES Meets ISO 10993-10: Third Edition 2010-08-01	Under conditions of this study, the test material did not cause an irritant response. The Primary Irritant Response Category is deemed 'Negligible'	Same
	Dermal Sensitization- ISO 10993-10: 2010 (E) & Consumer Product Safety Commission, Title 16, Chapter II, Part 1500.3 (c) (4)	Under the conditions of this study, the test article was a non-irritant or non-sensitizer.  SKIN IRRITATION DERMAL and SENSITIZATION STUDIES Meets ISO 10993-10: Third Edition 2010-08-01	Under conditions of this study, the test material did not produce a skin sensitization effect in the guinea pigs.	Same
	Acute Systemic Toxicity, ISO 10993-11:2017 (E)	Not Tested	Under conditions of this study, the test item did not induce any acute systemic toxicity in Swiss albino mice.	Different. The subject glove was tested using systemic toxicity test and passed, but the Predicate did not have the test performed

CHARACTERISTICS	STANDARDS	DEVICE PERFORMANCE		COMPARISON ANALYSIS
		PREDICATE	CURRENT	
		WHITE	WHITE	
Watertight (1000ml)	ASTM D5151:2019	<p>Meets</p> <ul style="list-style-type: none"> <li>• 21 CFR 800.20</li> <li>• ASTM D6319-10 (Reapproved 2015)</li> </ul> <p>Tested in accordance with ASTM D5151 (Reapproved 2015) with acceptable results</p>	<p>Meets</p> <ul style="list-style-type: none"> <li>• 21 CFR 800.20</li> <li>• ASTM D6319-10 (Reapproved 2015)</li> </ul> <p>Tested in accordance with ASTM D5151 (Reapproved 2015) with acceptable results At an AQL 1.5</p>	Same
Intended use	-	<p>Powder Free Nitrile Patient Examination Gloves, White Color is a disposable device intended for medical purposes that is worn on the examiner's hand or finger to prevent contamination between patient and examiner.</p>	<p>A Nitrile patient examination glove is a disposable device made of nitrile rubber intended for medical purposes that is worn on the examiner's hand or finger to prevent contamination between patient and examiner.</p>	Same
Size	Medical Glove Guidance Manual – Labeling	<p>Small Medium Large X Large</p>	<p>Extra Small Small Medium Large Extra Large</p>	<p>Similar The subject glove has an additional size Extra Small, which the Predicate does not offer</p>
Single use	Medical Glove Guidance Manual – Labeling	Single Patient Use	Single Use	Same



There are no significant differences between the two devices. They are the same or similar in terms of intended use, primary material (Nitrile), design, physical properties, thickness, powder-free compliance, color, and biocompatibility assessments.

## **7.0 Summary of Non-Clinical Testing**

The performance test data of the non-clinical tests for this powder free nitrile examination glove is summarized as per below.

Test Method	Standard	Purpose of Testing	Acceptance Criteria			Results		Status
				Before aging	After aging	Before aging	After aging	
Physical Properties	ASTM D412 (Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers-Tension)	To evaluate the tensile (tension) properties of glove.	Tensile strength	Min 14.0 MPa	Min 14.0 MPa	XS – 28.8 S – 28.6 M – 28.9 L – 28.1 XL – 28.7	XS – 30.8 S – 31.1 M – 31.8 L – 31.9 XL – 30.8	Pass
			Ultimate elongation	Min 500%	Min 400%	XS – 540 S – 540 M – 530 L – 540 XL – 540	XS – 460 S – 480 M – 480 L – 480 XL – 480	Pass

Test Method	Standard	Purpose of Testing	Glove Size	Acceptance Criteria		Results		Status
Dimension	ASTM D3767 Standard Practice for Rubber— Measurement of Dimensions	To measure the length, width and thickness of glove	X-Small	Length	Min 240 mm	Length	248 mm	Pass
				Width	70 ± 10 mm	Width	75 mm	Pass
				Thickness	Finger – min 0.05mm Palm – min 0.05mm	Thickness	0.09 mm 0.06 mm	Pass
			Small	Length	Min 240 mm	Length	245 mm	Pass
				Width	80 ± 10 mm	Width	85 mm	Pass
				Thickness	Finger – min 0.05mm Palm – min 0.05mm	Thickness	0.09 mm 0.06 mm	Pass
			Medium	Length	Min 240 mm	Length	244 mm	Pass
				Width	95 ± 10 mm	Width	95 mm	Pass
				Thickness	Finger – min 0.05mm Palm – min 0.05mm	Thickness	0.09 mm 0.06 mm	Pass
			Large	Length	Min 240 mm	Length	248 mm	Pass
				Width	110 ± 10 mm	Width	106 mm	Pass

				Thickness	Finger – min 0.05mm Palm – min 0.05mm	Thickness	0.09 mm 0.06 mm	Pass
			X-Large	Length	Min 240 mm	Length	244 mm	Pass
				Width	120 ± 10 mm	Width	116 mm	Pass
				Thickness	Finger – min 0.05mm Palm – min 0.05mm	Thickness	0.09 mm 0.06 mm	Pass

Test Method	Standard	Purpose of Testing	Acceptance Criteria	Results	Status
Watertight	ASTM D5151 (Standard Test Method for Detection of Holes in Medical Gloves)	To detect holes that leak water and thereby compromise the usefulness of the glove.	Sample size: 315 pcs Inspection level: G1 AQL: 1.5, Acceptance No. 10	<p>The batch size for this sampling is 150,001 to 500,000. Hence, according to the single sampling plan G1, the sample to be drawn is under code M equivalent to 315 pieces with accept 10 and reject 11 to be accepted under AQL 1.5.</p> <p>For Size XS During the test, 1 piece was found with leaks. Hence it falls within the acceptance criteria.</p> <p>For Size S During the test, 2 pieces were found with leaks. Hence it falls within the acceptance criteria.</p> <p>For Size M During the test, 2 pieces were found with leaks. Hence it falls within the acceptance criteria.</p> <p>For Size L During the test, 4 pieces were found with leaks. Hence it falls within the acceptance criteria.</p> <p>For Size XL During the test, 3 pieces were found with leaks. Hence it falls within the acceptance criteria.</p>	Pass

Test Method	Standard	Purpose of Testing	Acceptance Criteria	Results	Status
Residual Powder	ASTM D6124 (Standard Test Method for Residual Powder on Medical Gloves)	To determine the amount of residual and non-powder solids found on gloves	Less than 2 mg per glove Requirement : <2mg/glove	Sample size : 5 pcs  Result XS :0.24mg/glove Result S :0.28mg/glove Result M :0.34mg/glove Result L :0.32mg/glove Result XL :0.38mg/glove	Pass

### **8.0 Non-clinical performance testing methods full titles:**

- ASTM D412 Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
- ASTM D573 Test Method for Rubber—Deterioration in an Air Oven x ASTM D3578 Specification for Rubber Examination Gloves
- ASTM D6319 Standard Specification for Nitrile Examination Gloves for Medical Application
- ASTM D5151 Test Method for Detection of Holes in Medical Gloves
- ASTM D6124 Test Method for Residual Powder on Medical Gloves
- ISO 2859 Sampling Procedures and Tables for Inspection by Attributes Test results show that under the conditions of the testing, there is no difference in physical attributes between the proposed device and the predicate device.

### **9.0 Biocompatibility Testing utilizing: ISO 10993 Biological Evaluation of Medical Devices:**

- ISO 10993 - Part 10: Tests for Irritation and Sensitization. Both Skin Irritation and Dermal Magnuson/Kligman Sensitization performed.
- ISO 10993 – Part 11: Tests for assessment of Systemic Toxicity

### **10.0 Summary of Clinical Testing:**

No clinical studies are included in this submission.

### **11.0 Differences:**

There are no significant differences between the current glove and the predicate. They are identical in terms of their intended use, base materials, design, color, and manufacturing process.

### **Conclusion**

The conclusion drawn from the non-clinical tests demonstrate that the subject “White Nitrile Powder-Free Patient Examination Glove, Non-Sterile,” is as safe, as effective, and performs as well as, or better than, the legally marketed predicate device “Xingyu Nitrile Powder Free Patient Examination Gloves, White Color” (K171615)