

August 13, 2021

Zhangjiagang Fengyuan Plastic Products Co., Ltd. % Boyle Wang Correspondent Shanghai Truthful Information Technology Co., Ltd. RM.608,No.738,Shangcheng Rd.,Pudong Shanghai, Shanghai 200120 China

Re: K211351

Trade/Device Name: Nitrile Patient Examination Gloves Regulation Number: 21 CFR 880.6250 Regulation Name: Non-Powdered Patient Examination Glove Regulatory Class: Class I, reserved Product Code: LZA Dated: July 5, 2021 Received: July 12, 2021

Dear Boyle Wang:

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); labeling (21 CFR Part 801); 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 <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</u>) and CDRH Learn (<u>https://www.fda.gov/training-and-continuing-education/cdrh-learn</u>). 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 (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</u>) for more information or contact DICE by email (<u>DICE@fda.hhs.gov</u>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

For Clarence W. Murray, III, PhD 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)* K211351

Device Name Nitrile Patient Examination Gloves

Indications for Use (Describe)

The Nitrile Patient Examination Gloves are non-sterile disposable devices intended for medical purposes that are worn on the examiner's hands or finger to prevent contamination between patient and examiner.

Thursday of the state	(0 - 1 1	
Type of Use	(Select one or both,	as applicable)
1,90 0, 000	1001001 0110 01 00111,	

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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510(k) Summary (K211351)

This summary of 510(k) is being submitted in accordance with 21 CFR 807.92.

1.0 Submitter's Information

 Name: ZHANGJIAGANG FENGYUAN PLASTIC PRODUCTS CO., LTD.
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 Phone Number: +86-13705111918
 Contact: Huamei Wang
 Date of Preparation: Jul.5th,2021

Designated Submission Correspondent

Mr. Boyle Wang Shanghai Truthful Information Technology Co., Ltd. Room 608, No. 738 Shangcheng Rd., Pudong,Shanghai 200120 ,China Tel: +86-21-50313932 Email: Info@truthful.com.cn

2.0 <u>Device Information</u>

Trade name:Nitrile Patient Examination GlovesCommon name:Patient Examination GlovesClassification name:Non-powdered patient examination gloveModel(s):XS、S、M、L、XL、XXL

3.0 Classification

Production code:LZARegulation number:21CFR880.6250Classification:Class IPanel:General Hospital

4.0 Predicate Device Information

Manufacturer: Ever Global (Vietnam) Enterprise Corp Device: Disposable Powder Free Nitrile Examination Glove, White/ Blue/ Black/ Pink Color 510(k) number: K171422

5.0 Indication for Use

The Nitrile Patient Examination Gloves are non-sterile disposable devices intended for medical purposes that are worn on the examiner's hands or finger to prevent contamination between patient and examiner.

6.0 Device Description

The subject device is powder free nitrile examination gloves. The subject device is blue. The subject device is non-sterile.

7.0 Technological Characteristic Comparison Table

Table1-General Comparison						
ltem	Subject Device	Predicate Device	Remark			
510(k) number	K211351	K171422				
Product Code	LZA	LZA	Same			
Regulation No.	21CFR880.6250	21CFR880.6250	Same			
Class	The Niterile Detient		Same			
Intended Use	The Nitrile Patient Examination Gloves are non-sterile disposable devices intended for medical purposes that are worn on the examiner's hands or finger to prevent contamination between patient and examiner.	The Nitrile Powder Free patient examination glove is a non-sterile disposable device intended for medical purposes that is worn on the examiner's hands or finger to prevent contamination between patient and examiner.	Same			
Powdered or Powered free	Powdered free Powdered free		Same			
Main Material	Nitrile	Nitrile	Same			
Colorant	Blue	White/ Blue/ Black/ Pink	Same			
Design Feature	Ambidextrous	Ambidextrous	Same			
Single Use	Yes	Yes	Same			
Sterility status	Non-Sterile	Non-Sterile	Same			
Dimensions(mm)	Length: XS/S:≥220; M/L/XL/XXL: ≥230 Width: XS:70±10; S:80±10; M:95±10;	Length: ≥230 Width: XS:75±5; S:85±5; M:95±5; L:105±5; XL:115±5	Similar			

Table1-General Comparison

		1.440 1.40				1
		L:110±10;		-		
		XL:120±10;		Thickness:		
		XXL:130±10 Thickness: Finger: ≥0.05 Palm: ≥0.05		Finger: ≥ 0.05		
				Palm: ≥0.05		
	Before	Tensile	14MPa,min	Tensile	14MPa,min	Same
	Aging	Strength		Strength		
		Ultimate	500%min	Ultimate	500%min	Same
Physical		Elongation		Elongation		
Properties	After	Tensile	14MPa,min	Tensile	14MPa,min	Same
	Aging	Strength		Strength		
		Ultimate	400%min	Ultimate	400%min	Same
		Elongation		Elongation		Cumo
Freedom	from		holes when			Same
Holes	nom	Be free from holes when tested in accordance		Be free from h	noles when	Game
110163				tested in accordance with		
			with ASTMD5151		ASTMD5151 AQL=2.5	
Deveder			AQL=2.5		Moot the requirements of	
Powder C	Powder Content		Meet the requirements		Meet the requirements of	
		of ASTM D6124 $<$		ASTM D6124		
		2.0mg				
		Irritation: Under the		Under the conditions of this		
		conditions of the study,		study the test material did		
		not an irritant or a		not cause an irritant		
		sensitizer.		response.		
Biocompa	atibility	Sensitization: Under		Under the conditions of this		
		conditions of the study,		study,the test material did		
		not a sensitizer.		not produce a skin		
				sensitization effect		
		Cytotoxicity: Under				
		conditions of the study,		/		
		did not show potential				
		toxicity to L-929 cells.				
Labeling Information		Single-use indication, powder free, device		Single-use indication,		
				powder free, device color,		
				device name, glove size		
		color, device name,		and quantity, Disposable		Same
		•	and quantity,	Powder Free Nitrile		Carrio
		Nitrile Glove Powder		Examination Glove, Non-		
		Free, Blue, Non-Sterile				
				Sterile		

Analysis: The physical dimensions are different with that of the predicate, but they all meet the requirements of ASTM D6319-19.

8.0 Discussion of Non-clinical and Performance Testing

Non-clinical tests were conducted to verify that the proposed device met all design specifications. The test results demonstrated that the proposed device complies with the following standards:

ISO 10993-10:2010 Biological Evaluation of Medical Devices - Part 10: Tests For Irritation And Skin Sensitization.

ISO 10993-5:2009 Biological Evaluation of Medical Devices - Part 5: Tests For In Vitro Cytotoxicity

ASTM D6124-06 (Reapproved 2017), Standard Test Method for Residual Powder on Medical Gloves

ASTM D5151-19, Standard Test Method for Detection of Holes in Medical Gloves.

ASTM D6319-19, Standard Specification for Nitrile Examination Gloves for Medical Application.

Test	Purpose	Acceptance Criteria	Results	
Methodology				
ASTM D6319	Physical Dimensions Test	Length(mm): XS/S: \geq 220; M/L/XL/XXL: \geq 230 Width(mm): XS:70 \pm 10; S:80 \pm 10; M:95 \pm 10; L:110 \pm 10; XL:120 \pm 10; XXL:130 \pm 10 Thickness (mm): Finger: \geq 0.05 Palm: \geq 0.05	Length:>230 Width: XS:73-78; S:80-84; M: 95-98; L: 109-114; XL: 117-121; XXL:125-128 <u>Pass</u> Finger: 0.07-0.13 Palm: 0.07-0.13	
ASTM D5151	Watertightness	Meet the requirements of	0/125,1/125,	
	Test for	ASTM D5151 AQL 2.5	0/125,2/125,	
	Detection of		0/125,0/125 leaks	
	Holes		<u>Pass</u>	
ASTM D412	Physical	Before Tensile ≥14MPa	15-19.5	

 Table 2: Performance Characteristic Comparison

	properties	Aging	Strength		Pass		
	properties	/ ging	Ultimate	≥500%	<u>520-58</u>	0	
			_	≥500%		0	
			Elongation		Pass		
		After	Tensile	≥14MPa	15-19		
		Aging	Strength		Pass		
			Ultimate	≥400%	530-57	0	
			Elongation		<u>Pass</u>		
ASTM D6124	Powder	Meet t	the requirer	nents of	Average 0.07 mg		
	Content	ASTM D6124 < 2.0mg			Pass		
ISO 10993-5	Cytotoxicity	Non-cytotoxic			Under	conditic	ons
					of the	study,	did
					not sho	w poten	tial
					toxicity	to L-9	929
					cells.		
ISO 10993-10	Irritation	Non-irritating			Under	t	the
					conditio	ons of t	the
					study,	not	an
					irritant.		
					<u>Pass</u>		
ISO 10993-10	Sensitization	Non-sensitizing			Under	conditic	ons
					of the study, not a		t a
					sensitizer.		
					<u>Pass</u>		

9.0 Discussion of Clinical and Performance Testing

Clinical testing is not needed for this device.

10.0 <u>Conclusion</u>

The conclusions drawn from the nonclinical tests demonstrate that the subject device, K211351 ,is as safe, as effective, and perform as well as or better than the legally marketed predicated device.