

September 24, 2022

Dainam Glove Joint Stock Company % Jenny Nguyen Office Manager Bayneto LLC 13480 Veterans Memorial Drive, Suite F Houston, Texas 77014

Re: K212751

Trade/Device Name: Powder Free Nitrile Examination Glove

Regulation Number: 21 CFR 880.6250

Regulation Name: Non-powdered patient examination glove

Regulatory Class: Class I, reserved

Product Code: LZA Dated: August 16, 2022 Received: August 18, 2022

#### Dear Jenny Nguyen:

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 <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> 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 <u>Federal Register</u>.

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 <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); 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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

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

Sincerely,

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** 

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

### Indications for Use

Form Approved: OMB No. 0910-0120 Expiration Date: 06/30/2023 See PRA Statement below.

IO(k) Number (if known)
212751
evice Name
owder Free Nitrile Examination Glove
dications for Use (Describe)
lue Nitrile Examination Gloves Powder Free is disposable devices intended for medical purpose at are worn on the examiner's hand to prevent contamination between patient and examiner.
rpe of Use (Select one or both, as applicable)
Prescription Use (Part 21 CFR 801 Subpart D) Subpart C)

#### CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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### 510(k) Summary - K212751

Submitted by: Dai Nam JSC.

1765A Thu Dau Mot

Hiep An Ward, Thu Dau Mot, Vietnam.

Contact Person: Damon Nguyen

Director of U.S. Market dqn1967@gmail.com

Telephone Number: 832-458-4388

Date submitted: September 20, 2022

Trade/Device Name: Powder Free Nitrile Examination Glove

Regulation Number: 21 CFR 880.6250

Regulation Name: Non-powdered Patient Examination Glove

Regulatory Class: Class I Product Code: LZA

### **Identification of the legally marketed device:**

Predicate Device Name: Powder Free Black Nitrile Examination Glove

Predicate 510(K) Number: K201428

Manufacturer's Name: VIETGLOVE CORPORATION

### **5.1 Product Description**

Dainam JSC., Powder Free Gloves are Class I patient examination gloves bearing the product code Nitrile - LZA (21CFR880.6250). The gloves are made from acrylonitrile- butadiene copolymer dispersion. These gloves are blue in color and are powder free, non-sterile, single use and disposable and available in size XS-extra small, S-small, M-medium, L-Large, XL- Extra-large.

### 5.2 Intended Use/Indications for Use

Blue Nitrile Examination Gloves Powder Free are disposable devices intended for medical purpose that are worn on the examiner's hand to prevent contamination between patient and examiner.

# **5.3** Comparison of Technological Characteristics

Product	K201428	K212751	Results
	(Predicate)	(Subject)	
Design and Size Availability	S,M,L	XS,S,M,L,XL	Similar
Materials	Nitrile (Acrylonitrile butadiene)	Nitrile (Acrylonitrile butadiene)	Same
Intended	Non-Powdered Patient	Blue Nitrile	Similar
use/Indication	Examination Glove are	Examination Gloves	
for Use	disposable gloves used	Powder Free are	
	during medical	disposable devices	
	examinations and	intended for medical	
	procedures to help	purpose that are worn	
	prevent cross-	on the examiner's hand	
	contamination between	to prevent	
	caregivers and patients	contamination between	
		patient and examiner.	
Color	Black	Blue	
Product Code	LZA	LZA	Same
Classification	Class 1	Class 1	Same
510(K) Number	K201428	K212751	•••

Characteristics	Standards	Device Performa	Comparison		
		Predicate	Subject		
510(K) Number		K201428	K212751		
Name of device		Powder Free Black Nitrile Examination Glove	Powder Free Nitrile Examination Glove		
Dimensions	ASTM D6319- 2019	Length Min 242 m Width Min 95+/-10 mm (for medium size)	Length Min 230 mm Width Min 95+/-10 mm (for medium size)	Similar	

Characteristics	cteristics Standards Device Performance			Comparison	
		Predicate	Subject	•	
Physical Properties	ASTM D6319-2019	Before Aging Tensile Strength min 14 Mpa Ultimate Elongation Min 500% After Aging Tensile Strength min 14 Mpa Ultimate Elongation Min 508%	Before Aging Tensile Strength min 14 Mpa Ultimate Elongation Min 500% After Aging Tensile Strength min 14 Mpa Ultimate Elongation Min 505%	Similar	
Thickness	ASTM D6319-2019	Palm min 0.06 mm Finger min 0.11 mm	Palm min 0.06 mm Finger min 0.09 mm	Similar	
Powder Residue	ASTM D6319-2019	S: 0.43mg/glove M: 0.31 mg/glove L: 0.47 mg/glove	XS: 0.3mg/glove S: 1.4mg/glove M: 2.0 mg/glove L: 0.5 mg/glove XL: 0.7mg/glove	Similar	
	Primary Skin Irritation- ISO 10993- 10:2010(E)	Under the condition of study not an irritant	Under the condition of study not an irritant	Same	
Biocompatibility	Dermal Sensitization- ISO 10993-10:2010(E)	Under the conditions of the study not a sensitizer	Under the conditions of the study not a sensitizer	Same	
	In vitro cytotoxicity ISO10993-5 :2009(E)	Under the conditions of the study, cytotoxic	Under the conditions of the study cytotoxic	Same	
	Acute Systemic Toxicity Test ISO 10993- 11:2017(E)	Under the conditions of study the device extracts do not pose a systemic toxicity concern	Under the conditions of study the device extracts do not pose a systemic toxicity concern	Same	
	Material Mediated Pyrogenicity ISO 10993-11:2017(E)/USP 41<151>	N/A	Under the conditions of the study the device extract did not show a material mediated pyrogenicity response.	Different	
Watertight (1000 ml)	ASTM D5151- 2019	Passes AQL-2.5	Passes AQL-2.5	Similar	
Material	ASTM D6319- 2019	Nitrile	Nitrile	Same	
Color	-	Black	Blue	Different	
Texture	-	Finger Texture	Finger texture	Same	
Size	ASTM D6319-2019	Small, Medium, Large	Extra Small, Small, Medium, Large, Extra Large	Similar	
Sterility		Non-sterile	Non-sterile	Same	

Characteristics Standards		Device Pe	Comparison	
		Predicate	Subject	
0	Medical Glove Guidance Manual	Single Use	Single Use	Same
Manufacturer(s)	-	Vietglove Corporation	DaiNam Glove JSC	

### 5.4 Summary of Non-Clinical Testing

Non-clinical tests were conducted to verify that the proposed device complies with the following standards:

- 1) ISO 10993-10:2009 MTT Method MEM with 10%FBS extract: In Vitro Cytotoxicity Test of NITRILE EXAM GLOVES.
- 2) ISO 10993-10:2010 Guinea Pig Maximization Test 0.9% sodium Chloride Injection Extract: Sensitization Test of NITRILE EXAM GLOVES.
- 3) ISO 10993-10:2010 0.9% sodium Chloride Injection Extract: Skin Irritation Test of NITRILE EXAM GLOVES.
- 4) ISO 10993-10:2010 Guinea Pig Maximization Test Sesame Oil Extract: Sensitization Test of NITRILE EXAM GLOVES.
- 5) ISO 10993-10:2010 Sesame Oil Extract: Skin Irritation Test of NITRILE EXAM GLOVES.
- 6) ISO 10993-11:2017 Intravenous 0.9% Sodium Chloride Injection Extract: Acute Systemic Toxicity Test of NITRILE EXAM GLOVES.
- ISO 10993-11:2017 Intravenous Sesame Oil Extract: Acute Systemic Toxicity Test of NITRILE EXAM GLOVES
- 8) ISO 10993-11:2017 0.9% Sodium Chloride Injection Extract Rabbit: Pyrogen Test of NITRILE EXAM GLOVES

9) ASTM D6319-19, Standard Specification for Gloves for Medical Application.

Test Method	Purpose	Acceptance Criteria	Result
ASTM D6319-2019 Standard Specification for Gloves for Medical Application	To determine the length of the gloves	Min 230 mm for all sizes	X-Small: +/-240 mm Small: +/-240 mm Medium: +/-240 mm Large: +/-240 mm X-Large: +/-240 mm
ASTM D6319-2019 Standard Specification for Gloves for Medical Application	To determine the width of the gloves	X-Small: 70+/-10 mm Small: 80+/-10 mm Medium: 95+/-10mm Large: 110+/-10 mm X- Large: 120+/-10 mm	X-Small: 70+/-10 mm Small: 80+/-10 mm Medium: 95+/-10mm Large: 110+/-10 mm X-Large: 120+/-10 mm
ASTM D6319-2019 Standard Specification for Gloves for Medical Application	To determine the Thickness of the gloves	Palm 0.05 mm min Finger 0.05 mm min for all sizes	Size         Palm         Finger           X-Small         0.07mm         0.10mm           Small         0.07mm         0.9mm           Medium         0.07mm         0.9mm           Large         0.07mm         0.8mm           X-Large         0.07mm         0.7mm

Test Method	Purpose	Acceptance Criteria		Result	
ASTM D6319-2019 Standard Specification for Gloves for	Tensile strength	<b>Before Ageing</b> Tensile Strength 14Mpa Min for all sizes	Size  X-Small Small Medium Large X-Large	Before ageing 27Mpa 26Mpa 25Mpa 33Mpa 32Mpa	After ageing 25Mpa 26Mpa 27Mpa 36Mpa 33Mpa
Medical Application	To Determine the physical properties- Ultimate Elongation	Ultimate Elongation 500% Min for all sizes After Ageing Ultimate Elongation 400%	X-Small Small Medium Large X-Large	Before ageing 520% 567% 553% 568% 539%	After ageing 509% 545% 538% 560% 570%

Test Method	Purpose	Acceptance Criteria		Result
ASTM D5151-2019 Standard Test Method for Detection of Holes in Medical Gloves	To determine the holes in the gloves	AQL 2.5	Gloves Passes AQL 2.5	
	To determine the residual powder in the gloves	2 Mg/Glove Max	X-small Small Medium Large X-Large	Residual Powder Content  0.3mg/glove 1.4mg/glove 2 mg/glove 0.5 mg/glove 0.7mg/glove

### 5.5 BIOCOMPATIBILITY DATA

Test Method	Purpose	Acceptance Criteria	Result
ISO 10993-10 Biological Evaluation of Medical Devices Test for Irritation and Skin Sensitization. Test done for irritation.	To determine the potential of the glove under test to produce dermal irritation in Rabbits	Under the condition of study not an irritant	Under the condition of study not an irritant
ISO 10993-10 Biological Evaluation of Medical Devices Test for Irritation and Skin Sensitization. Test done Skin sensitization.	To determine the skin sensitization potential of the glove in Guinea Pig.	of the study not a	Under the conditions of the study not a sensitizer
ISO 10993-5:2009 biological evaluation of medical devices - part 5, tests for in vitro cytotoxicity.	To evaluate the in vitro cytotoxic potential of the test item in L-929 mouse fibroblasts cells using elution method.		Under the conditions of the study cytotoxic.
ISO 10993-11:2017 biological evaluation of medical devices - part 11, tests for systemic toxicity.	systemic toxicity potential of the test item extracts in mice.	extracts do not pose a systemic toxicity	Under the conditions of study the device extracts do not pose a systemic toxicity concern
Material Mediated Pyrogenicity ISO 10993- 11:2017		of the study, the device did not demonstrate a	Under the conditions of the study, the device did not demonstrate a material mediated pyrogenicity response.

# 5.6 Summary of Clinical Testing

Not applicable - Clinical data is not needed for the subject gloves.

### **5.7 Conclusion**

The conclusions drawn from the non-clinical test demonstrate that the subject device is as safe as effective and performs as well as or better than the legally marketed predicated device.