

May 8, 2023

Holik Asia Group Co., Ltd % Libray Chang Official Correspondent Shanghai Spica Management Consulting Co., Ltd. 609 Room, No.133 Shengang Avenue, Pudong New District Shanghai, 201306 China

Re: K223280

Trade/Device Name: Disposable nitrile gloves Regulation Number: 21 CFR 880.6250 Regulation Name: Non-Powdered Patient Examination Glove Regulatory Class: Class I, reserved Product Code: LZA Dated: April 12, 2023 Received: April 12, 2023

Dear Libray Chang:

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 <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 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,

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

Indications for Use

510(k) Number *(if known)* K223280

Device Name Disposable nitrile gloves

Indications for Use (Describe)

The Disposable nitrile gloves are intended to be worn on the hands of examiners to prevent contamination between patient and examiner. This is a single-use, powder-free, non-sterile device.

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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K223280

| <u>Type of submission</u> | Traditional |
|------------------------------|---|
| Date prepared | April 12, 2023 |
| Submission sponsor | |
| Manufacturer Name | HOLIK ASIA GROUP CO.,LTD |
| Address | NO.18 Nanyi Road, Xuanzhou Economic Development |
| | Zone, Liqiao Town, Xuanzhou District, Xuancheng City, |
| | Anhui Province, China |
| Tel | 86-13585161180 |
| Email | monica@holikasia.com |
| Contact Person | Monica Zhou |
| Device identification | |
| Trade Name | Disposable nitrile gloves |
| Regulation Number | 21 CFR 880.6250 |
| Regulation Name | Non-Powdered Patient Examination Glove |
| Device Classification | Class I |
| Product Code | LZA |
| Panel | General Hospital |
| | |
| Application correspondent | |
| Company Name | Shanghai Spica Management Consulting Co., Ltd. |
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| | District, Shanghai, China |
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| Email | Libray@spicagloble.com |
| | |

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Contact Person

Libray Chang

Predicate device information

| Sponsor | Shanxi Nacosa Medical Technology Co.,Ltd |
|-------------------|--|
| Trade/Device Name | Nitrile Examination Gloves |
| 510(K) number | K212924 |
| Regulation Number | 21 CFR 880.6250 |

Indications for use

The Disposable nitrile gloves are intended to be worn on the hands of examiners to prevent contamination between patient and examiner. This is a single-use, powder-free, non-sterile device.

Device description

The Disposable nitrile gloves are powder free nitrile examination gloves. The Disposable nitrile gloves will be provided in blue. It can be available in four specifications: S,M,L and XL. And it is non-sterile.

Performance Testing - Clinical

Not Applicable.

Performance Testing - Animal

Not Applicable.

Technological Characteristic Comparison

Provided below is a comparison of the subject device with the predicate device.

Table 6A: General Comparison

| Item | Subject Device K223280 | Predicate Device (K212194) | Comparison |
|-----------------------------|--|---|------------|
| Product Code | LZA | LZA | Same |
| Regulation No. | 21 CFR 888.6250 | 21 CFR 888.6250 | Same |
| Class | Ι | Ι | Same |
| Intended Use | The Disposable nitrile gloves are intended to be worn on the hands of examiners to prevent contamination between patient and examiner. This is a single-use, powder-free, non-sterile device. | The nitrile examination glove is intended to be worn on the hands of examiners to prevent contamination between patient and examiner. This is a single-use, powder-free,non-sterile device. | Same |
| Material | Nitrile | Nitrile | Same |
| Powdered or Powered free | Powdered free | Powdered free | Same |
| Design Feature | Ambidextrous | Ambidextrous | Same |
| Colorant | Blue | Blue | Same |
| Labeling | Single-use indication, powder free, device color, | Single-use indication, powder free, device color, | Same |

| Information device name, glove size and quantity, Non-Sterile | | | device name, glove size and quantity, Non-Sterile | | | |
|--|--------------|---|---|---|-----------|---------|
| Dimensions(mm) L: 1 | | Length(mm): >230; Width(mm): S: 85±5mm M: 95±5mm L: 105±5mm XL: 115±5mm | | Length(mm): >230; Width(mm): S: Average 84mm M: Average 95mm L: Average 111mm XL: Average 115mm | | Similar |
| Thickness(mm) | | Meet the requirements of ASTM D6319-19 Finger: 0.09-0.15 Palm: 0.06-0.07 | | Meet the requirements of ASTM D6319-19 Finger: 0.12-0.15 Palm: 0.08-0.10 | | Similar |
| | Before Aging | Tensile Strength | ≥14MPa | Tensile Strength | 17-38 MPa | Similar |
| Physical | | Ultimate Elongation | ≥500% | Ultimate Elongation | 501-565% | Similar |
| Properties | After Aging | Tensile Strength | ≥14MPa | Tensile Strength | 18-43MPa | Similar |
| | | Ultimate Elongation | ≥400% | Ultimate Elongation | 500-564% | Similar |
| Freedom from Holes Be free from holes when tested and teste | | tested in accordance with | Be free from holes when tested in accordance with ASTMD5151 AQL=2.5 | | Similar | |
| Powder Content<0.1mgMeet the requirements of ASTM D6124<2.0 | | 0.1-0.3mg Meet the requirements of ASTM D6124 <2.0 mg/gloves | | Similar | | |
| Biocompatibility | | ISO 10993-10; Under the conditions of the study, not an irritant or a sensitizer. | | ISO 10993-10; Under the conditions of the study, not an irritant or a sensitizer. | | Same |
| | | ISO 10993-11; Under the condition of acute systemic toxicity test, the test article did not show acute systemic | | ISO 10993-11; Under the condition of acute systemic toxicity test, the test article did not show acute systemic | | Same |

510(K) Summary

| toxicity in vivo. | toxicity in vivo. | |
|--|--|------|
| ISO 10993-5 | ISO 10993-5 | |
| Under conditions of the study, device extract is | Under conditions of the study, device extract is | Same |
| cytotoxic. | cytotoxic. | |

Analysis:

The physical dimensions, physical properties and powder content are different with that of the predicate, but they all meet the requirements of ASTM D6319.

Summary of Non-Clinical 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 10993-5:2009 Biological evaluation of medical device- Part 5: Tests for in vitro cytotoxicity
- ISO 10993-10:2010 Biological evaluation of medical device- Part 10: Tests for irritation and skin sensitization.
- ISO 10993-11:2017 Biological evaluation of medical devices Part 11: Tests for systemic toxicity.
- 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.
- ASTM D6124-06, Standard Test Method for Residual Powder on Medical Gloves.

Table 6B: Summary of Non-clinical performance testing

| Test method | Purpose | Acceptance Criteria | Results |
|-------------|--------------------------|---------------------|------------------------|
| ASTM D6319 | Physical Dimensions Test | Length(mm): $>230;$ | Length(mm): >230/Pass; |
| | | Width(mm): | Width(mm): |

| | | S: 85±5mm | | | S: 85mm/Pass |
|--------------|--|--|------------|----------------|------------------------|
| | | M: 95±5mm | | | M: 95mm/Pass |
| | | L: 105±5mm | | | L: 105mm /Pass |
| | | XL: 115±5mm | | XL: 115mm/Pass | |
| | | Thickness (mm): | | | Thickness (mm): |
| | | Finger: ≥0.05 | | | Finger: 0.09-0.15/Pass |
| | | Palm: ≥0.05 | | | Palm: 0.06-0.07/Pass |
| ASTM D5151 | Watertightness Test for Detection of Holes | Meet the requirements of ASTM D5151 AQL 2.5 | | | Pass |
| ASTM D6124 | Powder Content | Meet the requirements of ASTM D6124 < 2.0mg | | | <0.1mg/Pass |
| ASTM D412 | Physical properties | Before | Tensile | ≥14MPa | Pass |
| | | Aging | Strength | | |
| | | | Ultimate | ≥500% | |
| | | | Elongation | | _ |
| | | After Aging | Tensile | ≥14MPa | |
| | | | Strength | | |
| | | | Ultimate | ≥400% | |
| | | | Elongation | | |
| ISO 10993-5 | Cytotoxicity | No cytotoxic | | | Fail |
| ISO 10993-11 | Acute Systemic Toxicity | Non- acute systemic toxicity | | | Pass |
| ISO 10993-10 | Irritation | Non-irritating | | | Pass |
| ISO 10993-10 | Sensitization | Non-sensitizing | | | Pass |

Conclusion

The conclusions drawn from the nonclinical tests demonstrate that the subject device Disposable nitrile gloves are as safe, as effective, and performs as well as or better than the legally marketed predicated device K212924.