July 19, 2022

Hubei Qianjiang Kingphar Medical Material Co., Ltd
% Mr. Boyle Wang
General Manager
Shanghai Truthful Information Technology Co., Ltd.
Room 608, Number 738, Shangcheng Road, Pudong
Shanghai 200120
China

Re: K220777
Trade/Device Name: Surgical face mask
Regulation Number: 21 CFR 878.4040
Regulation Name: Surgical Apparel
Regulatory Class: Class II
Product Code: FXX
Dated: June 20, 2022
Received: June 27, 2022

Dear Mr. 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 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) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Brent Showalter, Ph.D.
Assistant Director
DHT6B: Division of Spinal Devices
OHT6: Office of Orthopedic 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: 06/30/2020
See PRA Statement below.

510(k) Number *(if known)*
K220777

Device Name
Surgical face mask

Indications for Use *(Describe)*
Surgical face mask is intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. It is intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non sterile.

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.

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

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510(k) Summary

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

1.0 Submitter's information

Name: Hubei Qianjiang Kingphar Medical Material Co., Ltd
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Contact: Zhao Fusong
Date of Preparation: 04/03/2022

Designated Submission Correspondent

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2.0 Device information

Trade name: Surgical face mask

Common name: Surgical face mask
Classification name: Mask, Surgical

Model(s): Ear loop/Tie on, 175×95mm

3.0 Classification

Production code: FXX
Regulation number: 21CFR 878.4040
Classification: Class II
Panel: Surgical apparel

4.0 Predicate device information

Manufacturer: Xiantao Rayxin Medical Products Co., Ltd.
Device: Disposable Surgical Face Mask
510(k) number: K153496

5.0 Indication for Use Statement

Surgical face mask is intended to be worn to protect both the patient and healthcare

personnel from transfer of microorganisms, body fluids and particulate material. It is intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non sterile.

6.0 Device description

The Surgical face mask is single use, three-layer, flat-pleated style with ear loops/ear straps and nose piece. The mask is manufactured with three layers, the inner and outer layers, and the tie on are made of nonwoven fabrics, and the middle layer is made of melt blown fabrics.

The model of proposed device, tie-on, is held in place over the uers's mouth and nose by four ties welded to the facemask. The tie is made of spun-bond polypropylene.

The model of proposed device, ear loops, is held in place over the uers's mouth and nose by two elastic ear loops welded to the facemask. The elastic ear loops are not made with natural rubber latex.

The ear straps/ear loops are not made with natural rubber latex. The nose piece on the layers of facemask is to allow the user to fit the facemask around their nose, which is made of Poly Ethylen. The Surgical face mask will be provided in blue. The masks are sold non-sterile and are intended to be single use, disposable devices.

7.0 Technological Characteristic Comparison Table

Table 1 - General Comparison

Item		Proposed device	Predicated device	Comparison
Product Code		FXX	FXX	Same
Regulation No.		21 CFR 878.4040	21 CFR 878.4040	Same
Class		II	II	Same
510(k) No.		K220777	K153496	-
Models		ear loop/Tie on, 175×95mm	Ear Loops, Tie-On, Flat Pleated, 3 layers	-
Intended Use		The Surgical face mask is intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. It is intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non sterile.	The Surgical Face Masks are intended to be worn to protect both the patient and healthcare personnel from transfer of microorganisms, body fluids and particulate material. These face masks are intended for use in infection control practices to reduce the potential exposure to blood and body fluids. This is a single use, disposable device(s), provided non-sterile.	Same
Composite		Flat Pleated, 3 layers	Flat Pleated, 3 layers	Similar
	Internal layer	Spun-bond polypropylene	Spun-bond polypropylene	Similar

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Material	Middle layer	Melt blown polypropylene	Melt blown polypropylene	Similar
	External layer	Spun-bond polypropylene	Spun-bond polypropylene	Similar
	Nose piece	Poly Ethylen	Malleable polyethylene wire	* Gap 1
	ear strap	Polyester	Polyester	Same
Color		Blue	Blue	Same
Dimension (Length) Dimension (Width)		17.5cm±0.5cm 9.5cm±0.5cm	17.5cm±1cm 9.5cm±1cm	* Gap 2

The proposed and predicate devices are based on the following same technological elements,

- Structures and dimensions
- Components materials
- Colors
- Sterility
- Single use
- ASTM F2100 level

The following technological differences exist between the proposed and predicate devices:

Gap 1: the two devices have some difference in materials of nose piece and ear straps of Tie-on models.

Gap 2: the two devices share same dimensions but the tolerance is different, the little deviation in tolerance.

Gap 3: the proposed device has higher performance level (Level 3) higher than the predicate device, the higher performance does not bring additional risks to the device.

Gap 4: the predicate device does not claim specific shelf life while the proposed device define its 5 years shelf life which is proved by its shelf life performance study, the clear shelf life does not bring additional risks to the product use.

8.0 Clinical Test Conclusion

No clinical study implemented for the Surgical face mask.

9.0 Non-Clinical Test Conclusion

The proposed device was tested and conformed to the related recognized standards and the requirements stated in the Guidance for Industry and FDA Staff: Surgical face masks – Premarket Notification [510(k)] Submission issued on March 5, 2004.

Table 2 - Performance Testing

Items	Purpose	Acceptance Criteria (Level 3, ASTM F2100-19)	Result
Bacterial filtration efficiency (BFE) (%)	The purpose of the test is to evaluate the Bacterial filtration efficiency (BFE) (%)	≥98	99.3-99.7% Pass
Different pressure (mmH_2O/cm^2)	The purpose of the test is to evaluate the Different pressure (mmH_2O/cm^2)	<6.0 mmH_2O/cm^2	2.9-3.8 mmH_2O/cm^2 Pass
Sub-micron particulate filtration efficiency at 0.1 micron, % (PFE)	The purpose of the test is to evaluate the Sub-micron particulate filtration efficiency at 0.1 micron, % (PFE)	≥98	99.74-99.90% Pass
Resistance to penetration by synthetic blood, Minimum pressure in mmHg for pass result	The purpose of the test is to evaluate the Resistance to penetration by synthetic blood, Minimum pressure in mmHg for pass result	29 of 32 test articles passed at 160mmHg	32 of 32 test articles passed at 160mmHg; Pass
Flammability	The purpose of the test is to evaluate the Flammability	Class 1	Class 1, Non Flammable Pass

Table 3 - Biocompatibility Testing

Item	Proposed Device	Result
Cytotoxicity	Under the conditions of the study, the device is noncytotoxic.	Pass
Irritation	Under the conditions of the study, the device is nonirritating.	Pass
Sensitization	Under the conditions of the study, the device is nonsensitizing	Pass

10.0 Conclusion

The conclusions drawn from the nonclinical test demonstrate that the proposed

device is as safe, as effective, and performs as well as the legally marketed predicated device.