



March 2, 2022

Medtecs (Taiwan) Corp.  
% Sandy Liu  
Consultant  
Jin Services Co.  
9F-1, No13, Lane41, Zhangrong Rd, Sec. 5, North District  
Tainan City, 70447  
Taiwan

Re: K203376

Trade/Device Name: ASTM Level 1/EN14683 Type IIR 3-Ply Disposable Surgical Mask, Model  
number: FM-1400G

Regulation Number: 21 CFR 878.4040

Regulation Name: Surgical Apparel

Regulatory Class: Class II

Product Code: FXX

Dated: February 7, 2022

Received: February 18, 2022

Dear Sandy Liu:

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](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

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)

K203376

Device Name

ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G

Indications for Use (Describe)

ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G are intended to be worn by operating room personnel during surgical procedures to protect both the surgical patient and the operating room personnel from transfer of microorganisms, body fluids and particulate material. The face masks are single use, disposable device, 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.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services  
Food and Drug Administration  
Office of Chief Information Officer  
Paperwork Reduction Act (PRA) Staff  
[PRASStaff@fda.hhs.gov](mailto:PRASStaff@fda.hhs.gov)

*"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."*



K203376

**510(k) Summary**

As required by 21CFR 807.92

Date of Preparation: 2020.10.30

**Applicant Information**

Company Name: MEDTECS (TAIWAN) CORP.  
Company Address: 11F., No. 9, Songgao Road  
Xinyi Dist., 11073, Taiwan  
Telephone: +886-2-27392222  
Fax: +886-2-27297896  
Contact Person: William Yang  
Summary Preparation Date: 2020.10.30

**Official Correspondent**

Company Name: Jin Services Co.  
Company Address: 9F-1, No13, Lane41, Zhangrong Rd, Sec. 5, North Distrit, Tainan  
City, Taiwan70447, Taiwan  
Telephone: +886-917535026  
Email: contact@fdaclass.com  
Contact Person: Sandy Liu, Consultant

**Device Name:**

Trade Name: ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask,  
Model number: FM-140G  
Classification Name: Surgical Mask  
Regulation Number: 878.4040  
Product Code: FXX  
Device Class: Class II  
Panel: General Hospital

**PREDICATE DEVICE:**

K123115, Surgical Face Mask with Ear-Loop, YN-50 JAG  
Acme Filter Mask Inc.

**REFERENCE DEVICE:**

K200847, Avianz® Surgical Face Mask

MEXPO INTERNATIONAL INC.

**Device Description**

The ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G is a single-use, three layer, flat-folded mask with ear loops and nose piece. The inner and outer layers are constructed of spun-bond non-woven polypropylene and the middle layer is constructed of melt blown non-woven polypropylene. The mask is held in place over the mouth and nose by two elastic ear loops welded to the facemask. The elastic ear loops are not made with natural rubber latex. The nose piece is made of malleable polyethylene with Galvanized iron wire and allows the user to fit the facemask around their nose. The ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G is sold non-sterile and is intended to be a single use, disposable device.

**Intended Use:**

ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G are intended to be worn by operating room personnel during surgical procedures to protect both the surgical patient and the operating room personnel from transfer of microorganisms, body fluids and particulate material. The face masks are single use, disposable device, provided non-sterile.

**Technological Characteristics Comparison**

The following is a summary of the technological characteristics of the ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G as compared to the predicate device.

| <b>Items</b>                            | <b>Subject Device</b><br>ASTM Level 1/EN14683 Type<br>IIR 3-Ply disposable Surgical<br>Mask, Model number: FM-<br>140G | <b>Predicate Device</b><br><b>Surgical Face Mask with Ear-Loop,</b><br><b>YN-50 JAG</b> | <b>Comparison</b><br><b>Result</b> |
|---|--|---|------------------------------------|
| <b>Submitter</b>                        | MEDTECS (TAIWAN) CORP.   | Acme Filter Mask Inc.   | N/A                                |
| <b>510(k)<br/>Number</b>                | N/A  | K123115   | N/A                                |
| <b>Device<br/>Regulation<br/>number</b> | 878.4040   | 878.4040  | same                               |
| <b>Classification</b>                   | II   | II  | same                               |

| Items                         | <b>Subject Device</b><br>ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G  | <b>Predicate Device</b><br><b>Surgical Face Mask with Ear-Loop, YN-50 JAG</b>  | <b>Comparison Result</b> |
|-------------------------------|---|--|--------------------------|
| <b>FDA Product Code</b>       | FXX   | FXX  | same                     |
| <b>Indications for Use</b>    | ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G are intended to be worn by operating room personnel during surgical procedures to protect both the surgical patient and the operating room personnel from transfer of microorganisms, body fluids and particulate material. The face masks are single use, disposable device, provided non-sterile. | Surgical Face Mask is Device that is intended to be worn by operating room personnel during surgical procedures to protect both the surgical patient and the operation room personnel from transfer of microorganisms, body fluids and particulate material. | Identical                |
| <b>Prescription for use</b>   | No  | No   | same                     |
| <b>Over the Counter</b>       | Yes   | Yes  | same                     |
| <b>Design</b>                 |   |  |                          |
| <b>Inner and Outer Layers</b> | Spun-bond polypropylene   | Spun-bond polypropylene  | same                     |
| <b>Middle Layer</b>           | Melt blown polypropylene filter   | Melt blown polypropylene filter<br>Identical   | same                     |
| <b>Ear loops</b>              | not made with natural rubber latex  | not made with natural rubber latex   | same                     |
| <b>Nose Piece</b>             | Malleable polyethylene with Galvanized iron wire  | Malleable polyethylene with aluminum wire  | <b>Different</b>         |
| <b>Dimensions</b>             | 17.5cmL x 9.3cm±0.5cm H<br>(6.89 x 3.66±0.2 inches)   | 17.5cm L x 9.5cm H   | Identical                |

| <b>Items</b>                                   | <b>Subject Device</b><br>ASTM Level 1/EN14683 Type<br>IIR 3-Ply disposable Surgical<br>Mask, Model number: FM-<br>140G | <b>Predicate Device</b><br><b>Surgical Face Mask with Ear-Loop,</b><br><b>YN-50 JAG</b> | <b>Comparison<br/>Result</b> |
|--|--|---|------------------------------|
| <b>Mask Style</b>                              | 3 flats pleated  | 3 flats pleated   | same                         |
| <b>Design<br/>Features</b>                     | Malleable nosepiece, flat<br>pleated, elastic ear loops  | Malleable nosepiece, flat pleated,<br>elastic ear loops                                 | same                         |
| <b>Model size</b>                              | One-Size (regular) fits all  | One-Size (regular) fits all   | Same                         |
| <b>Sterility</b>                               | Non-sterile  | Non-sterile   | same                         |
| <b>Use</b>                                     | Single Use, Disposable   | Single Use, Disposable  | same                         |
| <b>Color</b>                                   | Green  | Green   | same                         |
| <b>Contain any<br/>drugs or<br/>biologics</b>  | No   | No  | same                         |
| <b>face shield<br/>attached</b>                | no   | no  | same                         |
| <b>Foam strip<br/>attached</b>                 | no   | no  | same                         |
| <b>LATEX-<br/>FREE</b>                         | Yes  | Yes   | same                         |
| <b>Performance</b>                             |  |   |                              |
| <b>ASTM F2100<br/>Level</b>                    | Level 1  | Level 1   | same                         |
| <b>Fluid<br/>Resistance<br/>Performance</b>    | Fluid Resistance   | Fluid Resistance  | identical                    |
| <b>Bacterial<br/>Filtration<br/>Efficiency</b> | Higher than 99%  | Higher than 99%   | identical                    |
| <b>Differential<br/>Pressure<br/>(Delta P)</b> | Avg of 3.1 mmH <sub>2</sub> O/cm <sup>2</sup>  | Average 3.33 (mmH <sub>2</sub> O/cm <sup>2</sup> )                                      | <b>Different</b>             |
| <b>Particulate<br/>Filtration</b>              | Avg of 96.14% for 0.1 Sub-micron<br>Particulate Filtration   | Average 94.79% for Solid Aerosol<br>Filtration Efficiency                               | <b>Different<br/>*</b>       |

| <b>Items</b>                         | <b>Subject Device</b><br>ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G            | <b>Predicate Device</b><br><b>Surgical Face Mask with Ear-Loop, YN-50 JAG</b>   | <b>Comparison Result</b> |
|--------------------------------------|---|---|--------------------------|
| <b>Efficiency</b>                    |   |   |                          |
| <b>Flammability</b>                  | Class I (No Flame Spread)   | Class I (No Flame Spread)   | Identical                |
| <b>Biocompatibility</b>              |   |   |                          |
| <b>Cytotoxicity, ISO10993-5</b>      | Non-cytotoxic   | Non-cytotoxic   | Identical                |
| <b>Irritation, ISO10993-10</b>       | Non-irritating  | Non-irritating  | Identical                |
| <b>Sensitization, ISO10993-10</b>    | Non-sensitizing   | Non-sensitizing   | Identical                |
| <b>Labeling, Package and Storage</b> |   |   |                          |
| <b>Storage indication</b>            | Store in a dry and well-ventilated environment. Avoid high temperature and keep away from fire and flammable materials. | Store in a dry and well-ventilated environment. Avoid high temperature and keep away from fire and flammable materials. | Identical                |
| <b>Product labeling</b>              | All information showing on the Gift box   | All information showing on the Gift box   | Same                     |
| <b>Package materials</b>             | Paper un-seal gift box  | Paper un-seal gift box  | Same                     |
| <b>Product package</b>               | Paper Gift box (50 pcs/box)<br>Paper Carton box (40 gift boxes/carton)  | Paper Gift box (50 pcs/box)<br>No information for Carton box  | Identical                |
| <b>UDI included on the box</b>       | Yes (both gift box and Carton)  | No information for UDI  | <b>Different</b>         |
| <b>Shelf Life Claim</b>              | 5 Years   | 5 Years   | Same                     |

### Summary of Non-Clinical Testing

Per FDA document Guidance for Industry and FDA Staff: Surgical Masks – Premarket Notification [510(k)] Submissions, the below testing has been completed on 3 nonconsecutive lots of 32 samples for a total of 96 samples of the ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G ,



| Item                            | Standard   | Acceptance Criteria<br>(for Level 1 barrier)                    | Results  |
|---------------------------------|--|---|--|
| Fluid Resistance Performance    | F2100-19 clause 9.4/ASTM F1862-17: Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood   | At least 29 out of 32 specimens show passing results at 80 mmHg | All samples met the predetermined acceptance criteria. |
| Bacterial Filtration Efficiency | F2100-19 clause 9.1/ASTM F2101-19: Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face | ≥ 95%   | All samples met the predetermined acceptance criteria. |

| Item                              | Standard   | Acceptance Criteria<br>(for Level 1 barrier) | Results  |
|-----------------------------------|--|--|--|
|                                   | Mask Materials, Using a Biological Aerosol of Staphylococcus aureus  |  |  |
| Differential Pressure (Delta P)   | F2100-19 clause 9.2/EN14683:2019 Medical Face Masks— Requirements and Test Methods Annex C   | < 5.0 mm H <sub>2</sub> O/cm <sup>2</sup>    | All samples met the predetermined acceptance criteria. |
| Particulate Filtration Efficiency | F2100-19 clause 9.3/ASTM F2299-17: Test Method for Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres<br>Particulates Using Latex Spheres | ≥ 95%  | All samples met the predetermined acceptance criteria. |
| Flammability                      | F2100-19 clause 9.5/16 CFR 1610-2008: Standard for the Flammability of Clothing Textiles   | Class I, does not Ignite                     | All samples met the predetermined acceptance criteria. |
| Cytotoxicity                      | ISO10993-5 Third edition: Biological evaluation of medical devices-Part 5: Tests for in vitro cytotoxicity   | Non-cytotoxic                                | All samples met the predetermined acceptance criteria. |
| Irritation                        | ISO10993-10 Third Edition: Biological evaluation of medical devices-Part 10: Tests for irritation and skin sensitization   | Non-irritating                               | All samples met the predetermined acceptance criteria. |

| Item   | Standard   | Acceptance Criteria<br>(for Level 1 barrier)   | Results  |
|--|--|--|--|
| Sensitization  | ISO10993-10 Third Edition: Biological evaluation of medical devices-Part 10: Tests for irritation and skin sensitization | Non-sensitizing  | All samples met the predetermined acceptance criteria. |
| Performance Testing of Shipping Containers and Systems | ASTM D4169: Standard Practice for Performance Testing of Shipping Containers and Systems                                 | No visible damage was found on sample appearance after the test (Drop, Compression, Fixed vibration, Altitude, Vibration, Concentrated Impact) | All samples met the predetermined acceptance criteria. |

**Conclusions:**

The conclusion drawn from the non-clinical tests demonstrates that the subject device, the ASTM Level 1/EN14683 Type IIR 3-Ply disposable Surgical Mask, Model number: FM-140G, is as safe, as effective, and performs as well as or better than the legally marketed predicate device cleared under K123115.