

June 24, 2022

Little Rapids Corporation Tom Diedrich Manager of Product Development and Quality 2273 Larsen Road Green Bay, Wisconsin 54303

Re: K220377

Trade/Device Name: Procedure Mask Regulation Number: 21 CFR 878.4040 Regulation Name: Surgical Apparel

Regulatory Class: Class II

Product Code: FXX Dated: May 25, 2022 Received: May 31, 2022

#### Dear Tom Diedrich:

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

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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/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</a>) for more information or contact DICE by email (<a href="DICE@fda.hhs.gov">DICE@fda.hhs.gov</a>) 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: 06/30/2023

Expiration Date: 06/30/2023 See PRA Statement below.

K220377	
Device Name Procedure Mask	
Indications for Use (Describe) The Procedure Masks are intended to be worn to protect both th microorganisms, body fluids, and particulate material. These factoreduce the potential exposure to blood and body fluids. All materials.	ce masks are intended for use in infection control practices
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)

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.\*

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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# 510(k) Summary

Date Prepared: June 17, 2022

# A. Applicant:

LITTLE RAPIDS CORPORATION

Address: 2273 Larsen Road Green Bay, WI 54303

### **Submission Correspondent(s):**

**Primary contact: Tom Diedrich** 

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Green Bay, WI 54307-9031

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**Secondary contact: David Ledvina** 

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Green Bay, WI 54307-9031

Office Phone: (920) 490-5315 Email: dledvina@littlerapids.com

### **B. Device:**

**Device Name: Procedure Mask** 

Intended Branding: Graham Medical

Models: GFM31A (including MR Safe version), GFM42A, GFM43A

### **Regulatory Information:**

Classification Name: Mask, Surgical

**Regulation Description:** Surgical Apparel

**Regulation Specialty:** General & Plastic Surgery

**Review Panel:** General Hospital

Product code: FXX

Classification: Class II

**Regulation Number: 21 CFR 878.4040** 

### **C. Device Description:**

- Model GFM31A Procedure Mask will be provided with a nose wire for general medical use, and without a nose wire for use in an MRI environment. This model of Procedure Mask is manufactured with three layers. The user facing layer is made of white polypropylene spunbond; the filtration/middle layer is made of white polypropylene meltblown; and the outer layer is made of blue polypropylene spunbond. The ear loops are welded to the mask and are used to keep the mask close to the mouth and the nose. This device is not made with natural rubber latex. The PVC coated nose wire, when present, is used to fit the facemask around the user's nose. The product intended to be used in an MRI environment is constructed with the same materials except for the nose wire. The Procedure Mask is to be provided as a non-sterile, single use, disposable device.
- Model GFM42A Procedure Mask is manufactured with four layers. The user facing layer is made of white polypropylene spunbond; the filtration layer is made of white polypropylene meltblown; the next layer is made of blue polypropylene spunbond; and the outer layer is made of blue polypropylene spunbond. The ear loops are welded to the mask and are used to keep the mask close to the mouth and the nose. This device is not made with natural rubber latex. The PVC coated nose wire is used to fit the facemask around the user's nose. The Procedure Mask is to be provided as a non-sterile, single use, disposable device.
- Model GFM43A Procedure Mask is manufactured with four layers. The user facing layer is made of white polypropylene spunbond; the filtration layer is made of white polypropylene meltblown; the next layer is made of blue polypropylene spunbond; and the outer layer is made of blue polypropylene spunbond. The ear loops are welded to the mask and are used to keep the mask close to the mouth and the nose. This device is not made with natural rubber latex. The PVC coated nose wire is used to fit the facemask around the user's nose. The Procedure Mask is to be provided as a non-sterile, single use, disposable device.

### D. Indications for use of the device:

The Procedure 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. All models are single use, disposable devices, provided non-sterile.

### E. Shelf Life

A shelf-life is not applicable to this product because of low likelihood of time-dependent degradation.

# F. Labeling – Instructions for Use

Procedure Masks have commonly known directions for use and fall under the exemption for Instructions for Use under 21CFR Chapter 1 Subchapter H part 801 Subpart D Sec 801.116.

### **G. Predicate Devices:**

• Model GFM31A – ASTM Level 1

**Primary Predicate** 

**510K Number:** K111402 Kimberly Clark Corporation **Device Name:** Surgical Mask **Model:** KC200 (ASTM Level 2)

• Model GFM42A – ASTM Level 2

**Primary Predicate** 

**510K Number:** K111402 Kimberly Clark Corporation **Device Name:** Surgical Mask **Model:** KC200 (ASTM Level 2)

Model GFM43A – ASTM Level 3

**Primary Predicate** 

**510K Number:** K111402 Kimberly Clark Corporation **Device Name:** Surgical Mask **Model:** KC200 (ASTM Level 2) **Additional Predicate** 

**510K Number:** K202137 U-Play Products Corporation

**Device Name:** Disposable Medical Mask

Model: Y01 (ASTM Level 1)

### **Additional Predicate**

**510K Number:** K111402 Kimberly Clark Corporation **Device Name:** Surgical Mask **Model:** KC300 (ASTM Level 3)

# **H. Comparisons with Predicate Devices:**

## Model GFM31A – ASTM Level 1

	Proposed Device	Primary Predicate	Additional Predicate	Result
Manufacturer	Little Rapids Corporation	Kimberly Clark	U-Play Products	-
		Corporation	Corporation	
510K Number	K220377	K111402	K202137	-
Product Common	Procedure Mask	Surgical Mask	Disposable Medical Mask	Similar
Name(s)				
Model Number	GFM31A	KC200	Y01	-
Classification	Class II Device, FXX (21	Class II Device, FXX (21	Class II Device, FXX (21	Same
	CFR878.4040)	CFR878.4040)	CFR878.4040)	
Intended Use	The Procedure Masks are	The Kimberly-Clark, K0200	The Disposable Medical	Same
	intended to be worn to	and KC300 Face Mask(s) is	Masks are intended to be	
	protect both the patient and	intended to be worn to	worn to protect both the	
	healthcare personnel from	protect both the patient	patient and healthcare	
	transfer of microorganisms,	and healthcare personnel	personnel from transfer of	
	body fluids, and particulate	from transfer of	microorganisms, body	
	material. These face masks	microorganisms, body	fluids and particulate	
	are intended for use in	fluids, particulate material.	material. These face masks	
	infection control practices	These face masks are	are intended for use in	
	to reduce the potential	intended for use in	infection control practices	
	exposure to blood and body	infection control practices	to reduce the potential	
	fluids. Both models are	to reduce the potential	exposure to blood and	
	single use, disposable	exposure of the wearer to	body fluids. This is a single	
	devices, provided non-	blood and body fluids. The	use, disposable device(s),	
	sterile.	KC200 and KC300 face	provided non-sterile.	
		mask(s) is a single use,		
		disposable device(s),		
		provided non-sterile.		
Design Features	Ear Loops, Flat Pleated, 3	4 Ply, Ear Loops, Flat-	Ear Loops, Flat Pleated, 3	Similar
	layers, Nose Piece or No	Pleated or Tie-On Style	layers	
	Nose Piece			

Materials & Design				
Outer Facing Layer	Polypropylene Spunbond	Polypropylene Spunbond	Spun-bond polypropylene	Same
Middle (Filter) Layer	Polypropylene Meltblown Filter	Melt Blown Polypropylene Filter	Melt blown polypropylene filter	Same
Inner Facing Layer	Polypropylene Spunbond	Polyester Cellulose	Spun-bond polypropylene	Similar/Same
Nose Piece (When Applicable)	PVC Coated Steel Wire	Malleable	Polypropylene + steel wire	Similar
Ear loops	White, Nylon/Spandex, Latex Free	Polyester/Lycra Knitted	Nylon and Spandex; elastic nonwoven fabrics (spun-bond polypropylene and elastic body)	Same
Color	Blue	Blue	Blue	Same
Dimension (Length)	6.875" (+ 0.25", - 0.125")	6.5" ± 0.75"	175 ± 10mm	Same
Dimension (Width)	3.75" (± 0.125")	4" ± 07.5"	95 ± 10mm	Same
OTC Use	Yes	Yes	Yes	Same
Sterility	Non-sterile	Non-sterile	Non-sterile	Same
Use	Single Use, Disposable	Single Use	Single Use, Disposable	Same
ASTM F2100 Level	Level 1	Level 2	Level 1	Similar/Same
Performance Testing	Comparison			
Fluid Resistance	32 out of 32 passed at 80	Meets Performance	32 out of 32 pass at 80	All Meet
Performance ASTM	mmHg,	Requirements at 120 mm	mmHg,	Requirements
F1862	3 lots	Hg	3 lots	
Particulate Filtration Efficiency ASTM F2299	99.89%, 99.84%, 99.80%	98.4%	99.12%, 99.45%, 99.56%	All Meet Requirements
Bacterial Filtration Efficiency ASTM F2101	99.80%, 99.71%, 99.81%	99.7%	99.92%, 99.93%, 99.92%	All Meet Requirements
Differential Pressure (Delta P) EN 14683 Annex C	4.4 mmH₂O/cm², 4.7 mmH₂O/cm², 4.7 mmH₂O/cm²	4.50mmH₂O/cm²	3.0mmH <sub>2</sub> O/cm <sup>2</sup> , 4.2mmH <sub>2</sub> O/cm <sup>2</sup> , 3.7mmH <sub>2</sub> O/cm <sup>2</sup>	All Meet Requirements
Flammability 16 CFR 1610	Class 1	Class 1	Class 1	All Meet Requirements

Biocompatibility	ISO 10993	ISO 10993	ISO 10993	All Meet
				Requirements
Cytotoxicity	Under the conditions of the	Non-Cytotoxic	Under the conditions of	All Meet
	study, the device is non-		the study, the device is	Requirements
	cytotoxic		non-cytotoxic.	
Irritation	Under the conditions of the	Non-Irritating	Under the conditions of	All Meet
	study, the device is non-		the study, the device is	Requirements
	irritating*		non-irritating.	
Sensitization	Under the conditions of the	Non-Sensitizing	Under the conditions of	All Meet
	study, the device is non-		the study, the device is	Requirements
	sensitizing*		non-sensitizing	

<sup>\*</sup> Model GFM31A ASTM Level 1 mask uses the same materials as model GFM42A ASTM Level 2 mask and GFM43A ASTM Level 3 mask. Since the Level 2 and Level 3 masks include one (1) additional layer of spunbond material, these masks are considered the "worst case" models for biocompatibility testing and were subjected to all tests. The ASTM Level 1 mask was tested for Cytotoxicity only.

### Model GFM42A - ASTM Level 2

	Proposed Device	Primary Predicate	Result
Manufacturer	Little Rapids Corporation	Kimberly Clark	-
		Corporation	
510K Number	Not yet assigned	K111402	-
Product Common	Procedure Mask	Surgical Mask	Similar
Name(s)			
Model Number	GFM42A	KC200	-
Classification	Class II Device, FXX (21	Class II Device, FXX (21	Same
	CFR878.4040)	CFR878.4040)	
Intended Use	The Procedure Masks are	The Kimberly-Clark, K0200	Same
	intended to be worn to	and KC300 Face Mask(s) is	
	protect both the patient and	intended to be worn to	
	healthcare personnel from	protect both the patient	
	transfer of microorganisms,	and healthcare personnel	
	body fluids, and particulate	from transfer of	

<sup>\*\*</sup> Coloring in Spunbond occurs at the resin level and is a permanent part of the extruded fiber structure. Color is not known to make a difference in performance.

	I	I	
	material. These face masks	microorganisms, body	
	are intended for use in	fluids, particulate material.	
	infection control practices	These face masks are	
	to reduce the potential	intended for use in	
	exposure to blood and body	infection control practices	
	fluids. This is a single use,	to reduce the potential	
	disposable device, provided	exposure of the wearer to	
	non-sterile.	blood and body fluids. The	
		KC200 and KC300 face	
		mask(s) is a single use,	
		disposable device(s),	
		provided non-sterile.	_
Design Features	Ear Loops, Flat Pleated, 4	4 Ply, Ear Loops, Flat-	Same
	layers	Pleated or Tie-On Style	
Materials & Design			T
Outer Facing Layer	Polypropylene Spunbond	Polypropylene Spunbond	Same
Secondary Outer	Polypropylene Spunbond	Polypropylene Spunbond	Same
Layer			
Middle (Filter) Layer	Polypropylene Meltblown	Melt Blown Polypropylene	Same
	Filter	Filter	
Inner Facing Layer	Polypropylene Spunbond	Polyester Cellulose	Similar
Nose Piece	PVC Coated Steel Wire	Malleable	Similar
Ear loops	White, Nylon/Spandex,	Polyester/Lycra Knitted	Same
	Latex Free		
Color	Blue	Blue	Same
Dimension (Length)	6.875" (+ 0.25", - 0.125")	6.5" ± 0.75"	Same
Dimension (Width)	3.75" (± 0.125")	4" ± 07.5"	Same
OTC Use	Yes	Yes	Same
Sterility	Non-sterile	Non-sterile	Same
Use	Single Use, Disposable	Single Use	Same
ASTM F2100 Level	Level 2	Level 2	Same
Performance Testing	Comparison		

Fluid Resistance	32 out of 32 passed at 160	Meets Performance	Both Meet
Performance ASTM	mm Hg, 3 lots	Requirements at 120 mm	Requirements
F1862		Hg	
Particulate Filtration	99.84%, 99.85%, 99.87%	98.4%	Both Meet
Efficiency ASTM			Requirements
F2299			
Bacterial Filtration	99.8%, 99.7%, 99.7%	99.7%	Both Meet
Efficiency ASTM			Requirements
F2101			
Differential Pressure	4.7 mmH₂O/cm²,	4.50mmH₂O/cm²	Both Meet
(Delta P) EN 14683	5.0 mmH₂O/cm²,		Requirements
Annex C	5.0 mmH₂O/cm²		
Flammability 16 CFR	Class 1	Class 1	Both Meet
1610			Requirements
Biocompatibility	ISO 10993	ISO 10993	Both Meet
			Requirements
Cytotoxicity	Under the conditions of the	Non-Cytotoxic	Both Meet
	study, the device is non-		Requirements
	cytotoxic		
Irritation	Under the conditions of the	Non-Irritating	Both Meet
	study, the device is non-		Requirements
	irritating*		
Sensitization	Under the conditions of the	Non-Sensitizing	Both Meet
	study, the device is non-		Requirements
	sensitizing*		

<sup>\*</sup> Model GFM31A ASTM Level 1 mask uses the same materials as model GFM42A ASTM Level 2 mask and GFM43A ASTM Level 3 mask. Since the Level 2 and Level 3 masks include one (1) additional layer of spunbond material, these masks are considered the "worst case" models for biocompatibility testing and were subjected to all tests. The ASTM Level 1 mask was tested for Cytotoxicity only.

<sup>\*\*</sup> Coloring in Spunbond occurs at the resin level and is a permanent part of the extruded fiber structure. Color is not known to make a difference in performance.

## GFM43A - ASTM Level 3

Device	Proposed Device	Primary Predicate	Additional Predicate	Result
Manufacturer	Little Rapids Corporation	Kimberly Clark	Kimberly Clark	-
		Corporation	Corporation	
510K Number	Not yet assigned	K111402	K111402	-
Product Common	Procedure Mask	Surgical Mask	Surgical Mask	Similar
Name(s)				
Model Number	GFM43A	KC200	KC300	-
Classification	Class II Device, FXX (21	Class II Device, FXX (21	Class II Device, FXX (21	Same
	CFR878.4040)	CFR878.4040)	CFR878.4040)	
Intended Use	The Procedure Masks are	The Kimberly-Clark, K0200	The Kimberly-Clark, KC200	Same
	intended to be worn to	and KC300 Face Mask(s) is	and KC300 Face Mask(s) is	
	protect both the patient and	intended to be worn to	intended to be worn to	
	healthcare personnel from	protect both the patient	protect both the patient	
	transfer of microorganisms,	and healthcare personnel	and healthcare personnel	
	body fluids, and particulate	from transfer of	from transfer of	
	material. These face masks	microorganisms, body	microorganisms, body	
	are intended for use in	fluids, particulate material.	fluids, particulate material.	
	infection control practices	These face masks are	These face masks are	
	to reduce the potential	intended for use in	intended for use in	
	exposure to blood and body	infection control practices	infection control practices	
	fluids. This is a single use,	to reduce the potential	to reduce the potential	
	disposable device, provided	exposure of the wearer to	exposure of the wearer to	
	non-sterile.	blood and body fluids. The	blood and body fluids. The	
		KC200 and KC300 face	KC200 and KC300 face	
		mask(s) is a single use,	mask(s) is a single use,	
		disposable device(s),	disposable device(s),	
		provided non-sterile.	provided non-sterile.	
Design Features	Ear Loops, Flat Pleated, 4	4 Ply, Ear Loops, Flat-	4 Ply, Ear Loops, Flat-	Same
	layers	Pleated or Tie-On Style	Pleated or Tie-On Style	
Materials & Design				
Outer Facing Layer	Polypropylene Spunbond	Polypropylene Spunbond	Polypropylene Spunbond	Same

Secondary Outer Layer	Polypropylene Spunbond	Polypropylene Spunbond	Polypropylene Spunbond	Same
Middle (Filter) Layer	Polypropylene Meltblown Filter	Melt Blown Polypropylene Filter	Melt Blown Polypropylene Filter	Same
Inner Facing Layer	Spun-bond polypropylene	Polyester Cellulose	Polyester Cellulose	Same
Nose Piece	PVC Coated Steel Wire	Malleable	Malleable	Similar
Ear loops	White, Nylon/Spandex, Latex Free	Polyester/Lycra Knitted	Polyester/Lycra Knitted	Same
Color	Blue	Blue	Orange	Same/ Different**
Dimension (Length)	6.875" (+ 0.25", - 0.125")	6.5" ± 0.75"	6.5" ± 0.75"	Same
Dimension (Width)	3.75" (± 0.125")	4" ± 07.5"	4" ± 07.5"	Same
OTC Use	Yes	Yes	Yes	Same
Sterility	Non-sterile	Non-sterile	Non-sterile	Same
Use	Single Use, Disposable	Single Use	Single Use	Same
ASTM F2100 Level	Level 3	Level 2	Level 3	Same
Performance Testing	Comparison			
Fluid Resistance	32 out of 32 passed at 160	Meets Performance	Meets Performance	All Meet
Performance ASTM F1862	mm Hg, 3 lots	Requirements at 120 mm Hg	Requirements at 160 mm	Requirements
Particulate Filtration Efficiency ASTM F2299	99.84%, 99.85%, 99.87%	98.4%	98.4%	All Meet Requirements
Bacterial Filtration Efficiency ASTM F2101	99.8%, 99.7%, 99.7%	99.7%	99.7%	All Meet Requirements
Differential Pressure (Delta P) EN 14683 Annex C	4.7 mmH <sub>2</sub> O/cm <sup>2</sup> , 5.0 mmH <sub>2</sub> O/cm <sup>2</sup> , 5.0 mmH <sub>2</sub> O/cm <sup>2</sup>	4.50mmH₂O/cm²	3.20mmH₂O/cm²	All Meet Requirements
Flammability 16 CFR 1610	Class 1	Class 1	Class 1	All Meet Requirements
Biocompatibility	ISO 10993	ISO 10993	ISO 10993	All Meet Requirements

Cytotoxicity	Under the conditions of the study, the device is non-cytotoxic	Non-Cytotoxic	Non-cytotoxic	All Meet Requirements
Irritation	Under the conditions of the study, the device is non-irritating*	Non-Irritating	Non-irritating	All Meet Requirements
Sensitization	Under the conditions of the study, the device is non-sensitizing*	Non-Sensitizing	Non-sensitizing	All Meet Requirements

<sup>\*</sup> Model GFM31A ASTM Level 1 mask uses the same materials as model GFM42A ASTM Level 2 mask and GFM43A ASTM Level 3 mask. Since the Level 2 and Level 3 masks include one (1) additional layer of spunbond material, these masks are considered the "worst case" models for biocompatibility testing and were subjected to all tests. The ASTM Level 1 mask was tested for Cytotoxicity only.

<sup>\*\*</sup> Coloring in Spunbond occurs at the resin level and is a permanent part of the extruded fiber structure. Color is not known to make a difference in performance.

### I. Non-Clinical Test Conclusion

Non-clinical tests were conducted to verify that the proposed device met all design specifications as the same or similar to the predicate device. The test results demonstrated that the proposed device complies with the following standards and the requirements stated in the Guidance for Industry and FDA Staff: Surgical Masks – Premarket Notification [510(k)] Submission issued on March 5, 2004:

- ➤ ISO 10993-5: 2009 Biological Evaluation of Medical Devices -- Part 5: Tests For In Vitro Cytotoxicity
- ➤ ISO 10993-10: 2010 Biological Evaluation of Medical Devices Part 10: Tests for Irritation and Skin Sensitization
- > ASTM F2100, Standard Specification for Performance of Materials Used in Medical Face Masks
- ASTM F1862, Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood (Horizontal Projection of Fixed Volume at A Known Velocity)
- ➤ EN 14683, Medical Face Masks—Requirements and Test Methods
- ASTM F2101, Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) Of Medical Face Mask Materials, Using A Biological Aerosol of Staphylococcus Aureus
- ASTM F2299, Standard test method for determining the initial efficiency of materials used in medical face masks to penetration by particulates using latex spheres
- ➤ 16 CFR 1610, Standard for the Flammability of clothing textiles

Note – The ASTM (performance) tests noted above were conducted in triplicate on samples obtained from three non-consecutive production lots.

#### J. Clinical Test Conclusion

No clinical study is included in this submission.

#### K. Conclusion

Based on the nonclinical tests performed, the subject devices are as safe, as effective, and perform as well as the legally marketed primary predicate device Kimberly Clark Corporation KC200 cleared under K111402, and additional predicate devices U-Play Products Corporation Y01 cleared under K202137 and Kimberly Clark Corporation KC300 cleared under K111402.