



June 17, 2013

This 510(k) Summary is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

**Applicant** Kimberly-Clark\*  
1400 Holcomb Bridge Road  
Roswell, GA 30076

**Official Correspondent** Marcia Johnson, RAC, CBA  
Technical Leader, Regulatory Affairs  
Tel: 770.587.8566  
Fax: 920.380.6351  
email: marcia.johnson@kcc.com

**Trade Name:** Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes

**Classification Name:** Tracheal tube

**Device Classification and Product Code** Class II per 21 CFR §868.5730  
Product Code - BTR

AUG 20 2013

**Predicate Device**

The Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes subject of this submission are substantially equivalent to the KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes cleared in 510(k) K120985.

**Device Description:**

KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes are available in adult sizes 7.0, 7.5, 8.0, 8.5 and 9.0mm with a Murphy

Eye. They include a separate lumen with a dorsal opening above the cuff to provide access to the subglottic space. The subglottic space is reached via a normally open suction valve which includes a one-way port for rinsing the subglottic space with sterile saline (0.9% Sodium Chloride solution) or administering an air bolus to assist in maintaining a patent suction lumen patency. These devices are sold as disposable, sterile, single use, devices.

**Intended Use:** KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes are indicated for airway management by oral intubation of the trachea and for removal of secretions that accumulate in the subglottic space.

**Technological Characteristics** Both the modified Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes and the predicate KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes have the same basic fundamental technological characteristics. Both are polyvinylchloride tubes with a barrel-shaped polyurethane inflatable cuff and a suction lumen. Both incorporate a suction valve with integrated rinse port to aid in removing secretions that accumulate in the subglottic space. The only difference in the endotracheal tube is the change in a raw material used to bond the cuff to the endotracheal tube. Below is a comparison table that summarizes the technological characteristics of the subject and predicate tubes.

	<b>Kimberly-Clark* KimVent* Microcuff* Subglottic Suctioning Endotracheal Tubes (120985)</b>	<b>Device subject of this submission</b>
<b>Materials</b>		
<i>Endotracheal Tube</i>	PVC tube w/Barium Sulphate Radiopaque line	Same
<i>Pilot Balloon Assembly</i>	PVC Pilot Balloon  One-way valve (Bespak Check Valve) = PVC, Nitizile/Acetal/stainless steel  Inflation Tube/tail = PVC	Same

<b>Materials</b>	<b>Kimberly-Clark* KimVent* Microcuff* Subglottic Suctioning Endotracheal Tubes (120985)</b>	<b>Device subject of this submission</b>
<i>Inflatable Pressure Cuff</i>	Polyurethane with a barrel-shape	Same
<i>Suction System/Flush Port</i>	PVC Tube with Acrylonitrile Butadiene Styrene (ABS) Valve	Same
<i>Vent Connector</i>	Polypropylene	Same
<i>Ink</i>	All inks were confirmed to be non-cytotoxic, non- irritating and non- sensitizing through appropriate ISO 10993 testing.	Same
<i>Adhesives</i>	UV-Cure Adhesives, Cyanoacrylate Adhesive	Same, except the adhesive used to bond the cuff to the tube has changed from an adhesive to a solvent based blend of materials.
<b>Sizes</b>	7.0, 7.5, 8.0, 8.5, 9.0 (mm)	Same
<b>Shelf-life</b>	2 years	Same

**Summary of  
Testing:**

*Bench-top performance testing* was conducted to confirm suctioning efficiency and additional bench-top testing was conducted to assure conformance to the following standards.

- ISO 5361:1999, Anesthetic and respiratory equipment - Tracheal tubes and connectors.

*Biocompatibility testing* was conducted to assure conformance to the following standards:

- ANSI/AAMI/ISO 10993-3: 2003 Biological Evaluation of Medical Devices - Part 3: Tests for Genotoxicity, Carcinogenicity, and Reproductive Toxicity,
- ANSI/AAMI/ISO 10993-5:2009, Biological evaluation of

- medical devices - Part 5: Tests for In Vitro cytotoxicity
- ANSI/AAMI/ISO 10993-6, 2007 Biological Evaluation of Medical Devices - Part 6: Tests for Local Effects After Implantation
  - ANSI/AAMI/ISO 10993-10: 2010: Biological evaluation of medical devices - Part 10: Tests for Irritation and Skin Sensitization

Clinical testing was not conducted.

All results of testing met acceptance criteria and demonstrate no concerns of safety or effectiveness for the modified device.

**Conclusion:**

The modified Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes are substantially equivalent to the predicate device, Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes (K120985), in intended use, design, performance, principles of operation, and both are intended for single use. Test results confirm that the device is as safe and effective and performs as well as or better than the predicate device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

August 20, 2013

Kimberly-Clark Corporation  
Ms. Marcia Johnson, RAC, CBA  
Technical Leader, Regulatory  
1400 Holcomb Bridge Road  
ROSWELL GA 30076

Re: K131254  
Trade/Device Name: KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes  
Regulation Number: 21 CFR 868.5730  
Regulation Name: Tracheal Tube  
Regulatory Class: II  
Product Code: BTR  
Dated: June 20, 2013  
Received: June 21, 2013

Dear Ms. Johnson:

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. 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); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. 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 <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



Tejashri Purohit-Sheth, M.D.  
Clinical Deputy Director  
DAGRID

FOR

Kwame Ulmer M.S.  
Acting Division Director  
Division of Anesthesiology, General Hospital,  
Respiratory, Infection Control and  
Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

CONFIDENTIAL

2.

INDICATIONS FOR USE

510(k) Number (if known): K131254

Device Name: Kimberly-Clark\* KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes.

**Indications For Use:**

KimVent\* Microcuff\* Subglottic Suctioning Endotracheal Tubes are indicated for airway management by oral intubation of the trachea and for removal of secretions that accumulate in the subglottic space.

Prescription Use  (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Lester W. Schulthels Jr.  
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(Division Sign-Off)

Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

510(k) Number: K131254

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