



Food and Drug Administration  
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September 9, 2014

Adhezion Biomedical, LLC  
Ms. Caridad Smith  
Director of Regulatory Affairs and Quality Assurance  
One Meridian Boulevard, Suite 1B02  
Wyomissing, Pennsylvania 19610

Re: K133963

Trade/Device Name: SURGISEAL Twist™ Topical Skin Adhesive  
Regulation Number: 21 CFR 878.4010  
Regulation Name: Tissue Adhesive  
Regulatory Class: Class II  
Product Code: MPN  
Dated: August 13, 2014  
Received: August 14, 2014

Dear Ms. Smith:

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 Industry and Consumer Education 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" (21CFR 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 Industry and Consumer Education 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,

**David Krause -S**

for Binita S. Ashar, M.D., M.B.A., F.A.C.S.  
Director  
Division of Surgical Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K133963

Device Name  
SURGISEAL Twist™ Topical Skin Adhesive

### Indications for Use (Describe)

SURGISEAL Topical Skin Adhesive is intended for topical applications only to hold closed easily approximated skin edges of wounds from surgical incisions, including punctures from minimally invasive surgery, simple, thoroughly cleansed, trauma induced lacerations.

SURGISEAL may be used in conjunction with, but not in place of, deep dermal sutures

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)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

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.\***

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### 510(k) Summary

A summary of 510(k) safety and effectiveness information in accordance with the requirements of 21 CFR 807.92 is below:

<b><u>Submitter Information:</u></b>	
<b>Name</b>	Adhezion Biomedical, LLC
<b>Address</b>	One Meridian Boulevard Suite 1B02 Wyomissing, PA 19610
<b>Phone Number</b>	(828) 572-4201
<b>Fax Number</b>	(828) 726-7117
<b>Establishment Registration</b>	3006385287
<b>Name of contact person(s)</b>	Caridad Smith – Director of Regulatory Affairs/Quality Assurance Tracy Lofgren – Regulatory Consultant
<b>Date prepared</b>	August 27, 2014
<b><u>Name of Device:</u></b>	
<b>Trade or proprietary names</b>	SURGISEAL Twist™ Topical Skin Adhesive
<b>Common or usual name</b>	Device, Tissue Adhesive for Topical Approximation
<b>Classification name</b>	Class II
<b>Classification Panel</b>	General and Plastic Surgery Devices
<b>Regulation</b>	Class II, under 21 CFR 878.4010
<b>Product Code(s)</b>	MPN
<b>Legally Marketed device(s) to which equivalence is claimed</b>	SURGISEAL Stylus Twist™ Topical Skin Adhesive (K130474)
<b>Reason for 510(k) submission</b>	Device Modification – Dimensional Specification Change to Tip
<b>Device Description</b>	<p>SURGISEAL Twist Topical Skin Adhesives are sterile, professional liquid topical skin adhesives containing a monomeric (2-octyl cyanoacrylate) formulation and the colorant D &amp; C Violet #2. Each applicator is comprised of a plastic ampoule container contained within an applicator sleeve with the applicator tip. This Twist applicator tray is contained in an outer Tyvek pouch. When SURGISEAL is applied to the skin, it polymerizes in minutes.</p> <p><i>In vitro</i> studies have shown that SURGISEAL acts as a physical barrier to microbial penetration as long as the adhesive film remains intact. Clinical studies were not conducted to demonstrate microbial barrier properties and a correlation between microbial barrier properties and a reduction in infection have not been established.</p>



<p><b>Indications for use</b></p>	<p>SURGISEAL Twist Topical Skin Adhesive is intended for topical applications only to hold closed easily approximated skin edges of wounds from surgical incisions, including punctures from minimally invasive surgery, simple, thoroughly cleansed, trauma induced lacerations.</p> <p>SURGISEAL may be used in conjunction with, but not in place of, deep dermal sutures.</p>
<p><b>Technological Characteristics</b></p>	<p>The technological characteristics of SURGISEAL Stylus Twist and SURGISEAL Twist Topical Skin Adhesives are equivalent in performance.</p> <p>SURGISEAL Twist consists of a monomeric (2-octyl cyanoacrylate) liquid adhesive formulation packaged in a single-use applicator. The device is a low viscosity formulation to allow for varied layered applications of the adhesive to the intended area and allow for either a single thick, continuous layer or two thin layers of the adhesive to the wound area.</p> <p>The smaller tip dimensions of the SURGISEAL Twist applicator is the <u>only</u> difference between the subject and predicate devices.</p>
<p><b>Substantial Equivalence</b></p>	<p><u>Biocompatibility:</u></p> <p>The biocompatibility testing that was previously conducted to the currently marketed devices, SURGISEAL Stylus Twist (K130474) per the International Standard ISO-10993, “Biological Evaluation of Medical Devices, Part 1: Evaluation and Testing”. The existing testing is deemed supportive of the modified device. Based on the results from those studies, the subject device is considered to be non-toxic, non-irritating, non-sensitizing and biocompatible and no additional biocompatibility testing was necessary.</p> <hr/> <p><u>Performance Testing:</u></p> <p>The performance testing of SURGISEAL Twist Topical Skin Adhesive modified product is identical to the currently marketed product; therefore the performance testing provided in the Premarket Notification K130474 is the same. Additional bench testing was performed to support the dimensional tip specification modification to the currently marketed product. Bench tests included: Flexibility, Linear and Surface Coverage, Wound Closure Strength and Force Expression.</p> <p>In all cases, the dimensional tip specification modification SURGISEAL Twist Topical Skin Adhesive met specifications and demonstrated equivalence to the currently marketed device.</p> <hr/> <p><u>Sterilization and Shelf-Life</u></p> <p>The sterilization process of the dimensional tip specification modification</p>



	<p>device remains unchanged. All products within the SURGISEAL Twist Topical Skin Adhesive product family are sterilized in accordance with the order of operation of the assembly. First to be sterilized is the filled ampoule containing the adhesive, by gamma irradiation in accordance with ISO 11137-2:2006. Then the finished bulk applicator in the secondary packaging is sterilized by ethylene oxide in accordance with ISO 11135-1 and 2:2008.</p> <p>The proposed dimensional tip specification modification of SURGISEAL Twist™ Topical Skin Adhesives <u>does not impact</u> the 24 month (2 year) expiration date (shelf-life) of the currently marketing predicated devices.</p>
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Based on bench performance testing, the specification modification of the device, SURGISEAL Twist has demonstrated to be substantially equivalent to its currently marketed device from a safety and performance perspective, and has demonstrated that a dimensional tip modification to the product maintains approximation of wound edges.