

May 13, 2021

Prevest Denpro Limited % Angela Blackwell Senior Consultant Blackwell Device Consulting P.O. Box 718 Gresham, Oregon 97030

Re: K200555

Trade/Device Name: Prevest Denpro Dental Cements (Micron Bioactive, Micron Superior, Micron

Superior Capsules, Micron Luting, Micron Dentin Conditioner)

Regulation Number: 21 CFR 872.3275 Regulation Name: Dental Cement

Regulatory Class: Class II Product Code: EMA Dated: February 2, 2021 Received: February 12, 2021

Dear Angela Blackwell:

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 <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 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-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/training-and-continuing-education/cdrh-learn) 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">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,

For Michael Adjodha
Assistant Director
DHT1B: Division of Dental and ENT Devices
OHT1: Office of Ophthalmic, Anesthesia,
Respiratory, ENT and Dental 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) K200555
Device Name Prevest Denpro Dental Cements (Micron Bioactive, Micron Superior, Micron Superior Capsules, Micron Luting and Micron Dentin Conditioner)
Indications for Use (Describe)
Micron Bioactive Class III and V, Restoration of cervical erosions and root surface caries, Core buildup, Base/Liner Class I, limited Class II, temporary fillings Restoration of primary teeth
Micron Superior Shades A1, A2, A3 Class III, Class V, limited Class I Restoration of primary teeth, Core buildup
Micron Superior Capsules Shades A1, A2, A3 Class III, Class V, limited Class I Restoration of primary teeth, Core buildup
Micron Luting Cementation of all types of metal, porcelain fused to metal, and resin crowns, inlays, onlays, and bridges Cementation of orthodontic bands Cementation of stainless steel crowns or orthodontic appliances retained with stainless steel crowns Base/Liner
Micron Dentin Conditioner Dentin pre-treatment prior to filling with glass ionomer cement
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.

Prevest DenPro Dental Cements (Micron Bioactive, Micron Superior, Micron Superior Capsules, Micron Luting and Micron Dentin Conditoner)

510K Summary K200555 May 10, 2021

Name and Address: Prevest Denpro Limited

Export Promotion Industrial Park Bari Brahmana, Jammu 181133 India

Contact Person: Atul Modi Email: prevestindia@gmail.com Telephone: (941) 919 4280

Name of device: Prevest Denpro Dental Cements (Micron Bioactive, Micron Superior, Micron

Superior Capsules, Micron Luting, and Micron Dentin Conditioner)

Classification Name: dental cement

CFR: 21 CFR 872.3275

Primary Product Code: EMA

Submission Contact:

Angela Blackwell Blackwell Device Consulting P.O. Box 718 Gresham, OR 97030-0172 (704)450-9934 angela@blackwelldevice.com

Device Description:

Micron Bioactive is a radiopaque, hydroxyapatite modified-glass ionomer cement.

Micron Superior is a radiopaque glass ionomer cement. It comes in shades A1, A2 and A3.

Micron Superior Capsules is a radiopaque glass ionomer cement. Capsules come in shades A1, A2 and A3.

Micron Luting is a radiopaque, self-curing translucent, particle glass-ionomer luting material.

Micron Dentin Conditioner is a mild polyacrylic acid solution designed to remove the dentinal smear layer and to condition dentine, thus enhancing the bond between glass ionomer cement and the dentine.

Indications for Use:

Device Name	Indications
Micron Bioactive	Class III and V,
	Restoration of cervical erosions and root surface
	caries,
	Core buildup,
	Base/Liner
	Class I, limited Class II, temporary fillings
	Restoration of primary teeth
Micron Superior	Class III, Class V, limited Class I
	Restoration of primary teeth,
	Core buildup
Micron Superior Capsules	Class III, Class V, limited Class I
	Restoration of primary teeth,
	Core buildup
Micron Luting	Cementation of all types of metal, porcelain
	fused to metal, and resin crowns, inlays, onlays, and bridges
	Cementation of orthodontic bands
	Cementation of stainless steel crowns or
	orthodontic appliances retained with stainless
	steel crowns
	Base/Liner
Micron Dentin Conditioner	Dentin pre-treatment prior to filling with glass
	ionomer cement

Testing Summary:

Micron line products were tested for appearance of powder and liquid, opacity, radio-opacity, acid-soluble lead content, setting time, compressive strength, acid erosion, and film thickness according to protocols based on ISO 9917-1 as was appropriate for each material. pH was tested for Micron Dentin Conditioner.

Shelf life testing was completed on all devices using relevant protocols also used for the physical characteristics tested.

All tests results met the criteria in Table 1 of ISO 9917-1.

The dental cements contain ingredients found in the predicate and reference devices so no biocompatibility testing was done.

Primary Predicate Device: ProGlass Cements K101869 from Silmet

Reference Devices: Teethmate K131068 from Kuraray Ketac Conditioner K872984 from ESPE GMBH Riva Luting Capsules K040393 from Southern Dental Industries Glaslonomer FX-2 K031467 from Shofu

Substantial Equivalence:

The acid-base cements have similar ingredients to the predicate and reference devices, the same indications for use, and similar physical parameter testing protocols based on ISO 9917-1. Shelf life testing was also similar to the predicate device shelf life testing.

Dental Cements from Prevest Denpro Micron Line

	Subject Device	Predicate	Reference	Reference	Reference Device for
		Device	Device for	Device for	Ingredients
			additional	Hydroxyapatite	
			indications	ingredient	
Name	Micron Bioactive	ProGlass	ProGlass	Teethmate	Glaslonomer FX-2
		Two	Silver	K131068	K031467
		K101869	K101869		
Indications	Class III and V,	Class III and	Class I,	TEETHMATE	Glasionomer FX-II is
for Use	Restoration of	٧,	limited	DESENSITIZER	a glass polyalkenoate
	cervical erosions and	Restoration	Class II,	is indicated for	cement used for
	root surface caries,	of cervical	temporary	reduction of	dental restorations
	Core buildup,	erosions	fillings	tooth	Glasionomer FX-II is
	Base/Liner	and root	Restoration	hypersensitivity	intended for use as a
	Class I, limited Class	surface	of primary	by the	final restorative for
	II, temporary fillings	caries,	teeth,	following	deciduous teeth;
	Restoration of	Core	Core	treatments: [I]	a geriatric restorative
	primary teeth	buildup,	buildup,	Treatment of	for Class I, 11, III and
		Base/Liner	Base/Liner	dentin exposed	V cavities and
				by toothbrush	cervical erosions; a
				abrasion,	final restorative for
				gingival	Class I and 11 of
				recession,	adult dentition in
				periodontal	non-load bearing
				disease and/or	situations; an
				acid erosion [2]	intermediate
				Treatment of	restorative for heavy
				dentin after	stress cavities; a core
				mechanical	build up;
				tooth cleaning,	and for pit and
				scaling and/or	fissure fillings.
				root planing [3]	
				Treatment of	
				tooth surface	
				before and/ or	
				after bleaching	

				[4] Treatment of prepared dentin for fillings and/or prosthetic restorations	
Composition	Powder	Powder	Powder	Hydroxyapatite	Powder:
	Fluoroaluminosilicate	Alumino-	Alumino-		Fluoroaluminosilicate
	glass powder and	silicate	silicate		glass, pigments and
	hydroxyapatite	glass and	glass and		fluorescent material
	powder	silver	silver		Liquid: Acrylic acid
	Liquid	Liquid	Liquid		tri-carboxylic acid co-
	Polyacrylic acid	Polyacrylic	Polyacrylic		polymer solution,
	solution	acid	acid		tartaric acid
					Cocoa butter: Cocoa
					butter, white
					vaseline
Setting Time	1:30 – 2 min	3:10 min	4 min	N/A	2:30 min

	Subject Device	Predicate Device	Reference Device for Ingredients
Name	Micron Superior	ProGlass Two K101869	Glaslonomer FX-2 K031467
Indications for Use	Class III, Class V, limited Class I Restoration of primary teeth, Core buildup	Class III, Class V, limited Class I Restoration of primary teeth, Core buildup	Glasionomer FX-II is a glass polyalkenoate cement used for dental restorations Glasionomer FX-II is intended for use as a final restorative for deciduous teeth; a geriatric restorative for Class I, 11, III and V cavities and cervical erosions; a final restorative for Class I and 11 of adult dentition in non-load bearing situations; an intermediate restorative for heavy stress cavities; a core build up;

			and for pit and fissure fillings.
Composition	Powder Fluoroaluminosilicate glass powder Liquid Polyacrylic acid	Powder Alumino-silicate glass and polyacrylic acid Liquid Polyacrylic acid and distilled water	Powder: Fluoroaluminosilicate glass, pigments and fluorescent material Liquid: Acrylic acid tri-carboxylic acid copolymer solution, tartaric acid Cocoa butter: Cocoa butter, white vaseline
Setting Time	A1 3:30-3:35 min A2 5:20-5:30 min A3 3:15-3:20 min	3:10 min	2:30 min

	Subject Device	Predicate Device	Reference Device for
			Ingredients
Name	Micron Superior Capsules	ProGlass Two	Riva Luting Capsules
		K101869	K040393
Indications for Use	Class III, Class V, limited	Class III, Class V,	Suitable for
	Class I	limited Class I	cementation of
	Restoration of primary	Restoration of	crowns,
	teeth,	primary teeth,	bridges, inlays and
	Core buildup	Core buildup	orthodontic
			bands.
			Also suitable for
			sealing interface
			between restoration
			and tooth and
			base / liner in deep
			restorations.
Composition	Powder	Powder	Powder
	Fluoroaluminosilicate	Alumino-silicate	Fluoro Aluminosilicate
	glass powder	glass and polyacrylic	Glass
	Liquid	acid	Polyacrylic Acid
	Polyacrylic acid	Liquid	Liquid
		Polyacrylic acid and	Polyacrylic acid
		distilled water	Tartaric Acid
			water
Working Time	1:30 min	1:30-2 min	unknown
Setting Time	A1 3:30-3:35 min	3:10 min	unknown
	A2 5:20-5:30 min		
	A3 3:15-3:20 min		

	Subject Device	Predicate Device	Reference Device for Ingredients
Name	Micron Luting	ProGlass One K101869	Glaslonomer FX-2 K031467
Indications for Use	Cementation of all types of metal, porcelain fused to metal, and resin crowns, inlays, onlays, and bridges Cementation of orthodontic bands Cementation of stainless steel crowns or orthodontic appliances retained with stainless steel crowns Base/Liner	Cementation of all types of metal, porcelain fused to metal, and resin crowns, inlays, onlays, and bridges Cementation of orthodontic bands Cementation of stainless steel crowns or orthodontic appliances retained with stainless steel crowns Base/Liner	Glasionomer FX-II is a glass polyalkenoate cement used for dental restorations Glasionomer FX-II is intended for use as a final restorative for deciduous teeth; a geriatric restorative for Class I, 11, III and V cavities and cervical erosions; a final restorative for Class I and 11 of adult dentition in non-load bearing situations; an intermediate restorative for heavy stress cavities; a core build up; and for pit and fissure fillings.
Composition	Powder Fluoroaluminosilicate glass powder Liquid Polyacrylic acid with thin viscosity	Powder Alumino-silicate glass and polyacrylic acid Liquid Polyacrylic acid and distilled water	Powder: Fluoroaluminosilicate glass, pigments and fluorescent material Liquid: Acrylic acid tri-carboxylic acid co- polymer solution, tartaric acid Cocoa butter: Cocoa butter, white vaseline
Setting Time	2:30 min	3:10 min	2:30 min

	Subject Device	Predicate Device
Name	Micron Dentin	Ketac Conditioner
	Conditioner	K872984
Indications for Use	Dentin pre-treatment	Dentin pre-
	prior to filling with glass	treatment prior to
	ionomer cement	filling with glass
		ionomer cement

Composition	Polyacrylic acid solution	Polyacrylic acid
		solution

Shelf life testing for all 5 devices is 3 years (testing for two devices was done on each of 3 shades) and used the same physical parameters protocols as the testing. This is the same type of protocols as the shelf life testing for the predicate devices from Silmet but the current shelf life of those devices is unknown.

Conclusion: Prevest Denpro Powder/Liquid Acid-Base dental cements are substantially equivalent to the predicate devices, ProGlass. They have the same indications, similar testing (including shelf life testing), and very similar ingredients. Both the subject devices and the predicate devices have setting times which meet requirements of ISO 9917-1 Table 1 for the respective type of cement. Reference devices are included to cover any ingredients, or indications not covered by the predicate devices. Any differences in ingredients are minor and do not change the substantial equivalence.