

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

August 18, 2015

YTY INDUSTRY (MANJUNG) SDN. BHD. Ms. Punitha Samy Assistant Manager-DC/RA Lot 1422-1424, Batu 10 Lekir 32020 Sitiawan, Perak Malaysia

Re: K143289

Trade/Device Name: Non-Sterile, Power Free Nitrile Examination Gloves - Orange, Green, Blue and Violet Color
Regulation Number: 21 CFR 880.6250
Regulation Name: Patient Examination Glove
Regulatory Class: I
Product Code: LZA
Dated: July 7, 2015
Received: July 13, 2015

Dear Ms. Samy:

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 <u>Federal Register</u>.

Page 2 - Ms. Samy

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" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<u>http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</u> 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,

Tejashri Purohit-Sheth, M.D.

Tejashri Purohit-Sheth, M.D. Clinical Deputy Director DAGRID/ODE/CDRH FOR

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

Enclosure

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

#### Indications for Use

510(k) Number (if known) K143289

Device Name

Non-Sterile Powder Free Nitrile Examintion Gloves - ORANGE, GREEN, BLUE AND VIOLET COLOR

Indications for Use (Describe)

A patient examination gloves is a disposable device intended for medical purpose that is worn on the examiner's hand or fingers to prevent contamination between patient and examiner.

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.

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Form Approved: OMB No. 0910-0120 Expiration Date: January 31, 2017 See PRA Statement below.



K143289

## 510 (K) SUMMARY SHEETS

1.0 510 (K) SUMMARY 2.0 YTY INDUSTRY (MANJUNG) SDN. BHD., Submitter Lot 1422-1424, Batu 10 Lekir 32020 Sitiawan, Perak Malaysia Tel 605-6908533 Fax 605-6908533 Name of Contact Person 1. MS. PUNITHA SAMY E-mail:punitha@ytygroup.com.my Date Summary Prepared August 11, 2015 3.0 Name of Device Trade Name: Non-Sterile, Powder Free Nitrile Examination Gloves - Orange, Green, Blue and Violet Color. Common Name: Nitrile Examination Gloves Classification Name: Patient Examination Gloves, Powder Free Device Classification: I **Regulation Number:** 21 CFR 880.6250 Panel: General Hospital (80) Product Code: LZA 4.0 **Identification of The Legally Marketed Devices** Predicate Device Name: Non-Sterile On Line Powder Free Nitrile Blue & White Color Examination Glove]

Predicate 510(K) number: K052502

Manufacturer's Name: YTY Industry (Manjung) Sdn Bhd Lot 1422-1424, Batu 10 Lekir, 32020 Sitiawan, Perak Darul Ridzuan

## 5.0 Description of The Device

Non-Sterile, Powder Free Nitrile Examination Gloves – Orange, Green, Blue and Violet Color Color meets all the current specifications listed under the ASTM Specification D6319-10, Standard Specification for Nitrile Examination Gloves for Medical Application. The principle operation and mechanism of this device is to prevent contamination between patient and examiner and this principle is achieved through testing of barrier, physical properties and other testing stated in the performance data. This device is for over-the counter single use.

## 6.0 The Intended Use of Glove

A patient examination gloves is a disposable device intended for medical purpose that is worn on the examiner's hand or finger to prevent contamination between patient and examiner. This device is for over-the counter use.

# 7.0 Summary of the Technological Characteristic of the Device compared to the Predicate Device for substantial equivalent discussion

There is no difference in technology characteristic compared to the predicate device. Gloves are made from nitrile latex compound. Non-Sterile, Powder Free Nitrile Examination Gloves – Orange, Green, Blue and Violet Color have the below technological characteristic compared to ASTM or Equivalent standards.

Characteristic	Standards	Performance of		
		Non-Sterile, Powder Free Nitrile		
		Examination Gloves – Orange,		
		Green, Blue and Violet Color		
Dimension	ASTM D6319-10	Meets		
Physical Properties	ASTM D6319-10	Meets		
Freedom from holes	ASTM D6319-10	Meets		
Powder-free	ASTM D6319-10	Meets		
Bio-compatibility	Primary skin irritation	Non-Irritant		
	ISO 10993-10 (2010)			
	Dermal Sensitization	Non-sensitizer		
	ISO 10993-10 (2010)			

Test	FDA 1000ml Water Leak Test	YTY Po	Non-Sterile On Line Powder Free Nitrile Blue & White Color Examination Glove			
1. Watertight (1000ml) ASTM D5151-06 (2011)	Multiple Normal GII	Orange	Green	Blue	Violet	Predicate K052502
Test ASTM D6319-10	AQL = 2.5 ASTM D6319-10	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)
2. Length (mm) Size M	Min 230	242-257	240-249	240-250	240-244	240-251
3. Palm width (mm) Size M	95 <u>+</u> 10	96-100	95-99	95-99	96-98	94-96
4. Thickness (mm) (Single Layer)						
Finger Palm	Min 0.05 Min 0.05	0.11-0.14 0.09-0.11	0.11-0.14 0.07-0.08	0.09-0.10 0.05-0.06	0.09-0.11 0.06-0.07	015-0.19 0.12-0.16
5. Physical Properties						
Before Aging Tensile Strength (MPa) Ultimate Elongation (%)	Min 14 Min 500	21.21- 29.63 540-600	24.15- 29.21 580-620	28.46-33.44 520-580	23.22- 29.11 520-580	26.00-30.00 750-800
After Aging Tensile Strength (MPa)	Min 14	29.23- 33.56	28.72- 34.84	29.76-34.18	27.39- 30.82	25.00-28.00
Ultimate Elongation (%)	Min 400	480-520	520-540	440-520	440-500	670-730
6. Residual Powder ASTM-D6124-10 (Reapproved 2011)	Max 2.0mg/glove	0.16mg/ glove	0.24mg/ glove	0.20mg/ glove	0.14mg/ glove	0.20mg/ glove
7. Biocompatibility Primary Skin Irritation Dermal Sensitization	ISO 10993- 10 (2010) Non-irritant Non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Non-irritant Non-sensitizer

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		Ар	plicant				
Characteristics	Blue - Blue - Blue - Blue -				Predicate K052502	Medical Glove Manual (1661)	
	Grape	Apple	Peppermint	Vanilla			
Company Name	YTY Industry (Manjung) Sdn Bhd				YTY Industry (Manjung) Sdn Bhd	FDA	
Product Name		,	Free Scented Blu	ie	Non-Sterile, On Line	Patient Examination	
	Nitrile Ex	amination	Gloves		Powder Free Nitrile	Gloves	
					Blue & White Color		
					Examination Gloves		
Product Code	LZA				LZA	LZA – (Polymer –	
						other than Vinyl	
						(includes Nitrile,	
						Polyurethane, etc.)	
Indication for Use	A patient ex	amination	gloves is a dispos	sable	This is a medical glove	Powder-Free	
			dical purpose tha		to be worn on the hand	Examination Gloves	
			or fingers to pre		of health care and	A powder-free patient	
	contaminati	on between	patient and exar	niner.	similar personnel to	examination glove is a	
					prevent contamination	disposable device	
					between health care	intended for medical	
					personnel and the	purposes that is worn	
					patient.	on the examiner's hand	
						or finger to prevent contamination between	
Device Develoption	NL C(	D. 1.	<b>E</b>	1	Class 1 Nitrile Patient	patient and examiner.	
Device Description			Free Scented B		Examination Glove	This gloves meet all current specifications	
			Gloves meets all		80LZA, powder free that	listed under ASTM	
			sted under the A		meets all requirements of	specifications D6319-	
	1		), Standard Speci		ASTM Standard D6319-	10	
			Gloves for Med		00ae3 and FDA water	10	
		. This device	e is for over-the	counter	leak test.		
	single use.				leak test.		
Over the Counter	This device	is for over-	the counter singl	e use.	This device is for over-	Indication for use	
Use			C C		the counter single use.		
Single Use	Single Use				Single Use	Labeling	
Non Sterile or	Non Sterile				Non Sterile	Sterilization	
Sterile							
Powder Free	Powder Fre	e			Powder Free	Process & Attribute	
						labeling	
<b>Compare materials</b>	-				1		
Materials	Carboxylate	ed Butadien	e Acrylonitrile		Carboxylated Butadiene	LZA – (Polymer –	
					Acrylonitrile	other than Vinyl	
						(includes Nitrile,	
						Polyurethane, etc.)	

## 8.0 Substantial Equivalence Comparison Table with Predicate Device, K052502

Characteristics		K14	43289	Predicate K052502	Medical Glove	
	Orange Geen Blue Violet				<b>Manual</b> (1661)	
Company Name	YTY Industry (Manjung) Sdn Bhd				YTY Industry (Manjung) Sdn Bhd	
Specifications and Performance	Dimension: Physical Pr Barrier: AQ	Current gloves meet ASTM D6319-10 Nitrile				
Tensile Strength before aging (MPa)	21.21- 29.63	24.15- 29.21	28.46- 33.44	23.22- 29.11	26.00-30.00	gloves
Tensile Strength after aging (MPa)	29.23- 33.56	28.72- 34.84	29.76- 34.18	27.39- 30.82	25.00-28.00	ASTM D6124-06 (Reapproved
Ultimate Elongation before aging (%)	540-600	580-620	520-580	520-580	750-800	2011) Residual Powder
Ultimate Elongation after aging (%)	480-520	520-540	440-520	440-500	670-730	ASTM D5151-06
Dimensions Length (mm)	242-257	240-249	240-250	240-244	240-251	(Reapproved 2011) Detection
Dimensions Width (mm)	96-100	95-99	95-99	96-98	94-96	of Holes in Medical Gloves
Thickness Finger (mm)	0.11-0.14	0.11-0.14	0.09-0.10	0.09-0.11	0.15-0.19	
Thickness Cuff (mm)	0.07-0.09	0.06-0.07	0.04-0.05	0.05-0.06	0.09-0.10	
Thickness Palm (mm)	0.09-0.11	0.07-0.08	0.05-0.06	0.06-0.07	0.12-0.16	
AQL	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	
Residual Powder (mg/glove)	0.16mg/ glove	0.24mg/ glove	0.20mg/ glove	0.14mg/ glove	0.20mg/glove	
Size	М	М	М	М	М	-
Bio-compatibility	Under the condition of the study the device is	Under the condition of the study the device is	Under the condition of the study the device is	Under the condition of the study the device is non-	Non-irritant Non-sensitizer	ISO 10993-10 Test for Irritation and Skin Sensitization
	non- irritant and non- sensitizer	non- irritant and non- sensitizer	non- irritant and non- sensitizer	irritant and non- sensitizer		
Labeling for legally marketed predicate	-Powder Free -devices color -Scent -Patient Examination Glove -Non sterile -Single Use Only -Manufactured for -Lot -Intended use				-Powder Free -devices color: Clear (Blue) -Patient Examination Glove -Non sterile -Single Use Only -Manufactured for: -Lot	Chapter 4 - Labeling

## 9.0 Conclusion

The conclusions drawn from the non-clinical tests demonstrate that the device, Non-Sterile, Powder Free Nitrile Examination Gloves – Orange, Green, Blue and Violet Color and the predicate device is substantially equivalent based on intended uses, physical properties, technological characteristics and non-clinical performance. This device is as safe, effective, and performs as well as the predicate device.