

December 5, 2017

Visco Vision Inc. Evan Huang Director of Global QA No. 1, Xingye St., Guishan Dist., Taoyuan City, 33341 TW

Re: K171447

Trade/Device Name: OxyPure Color Silicone Hydrogel Soft Contact Lenses

Regulation Number: 21 CFR 886.5925

Regulation Name: Soft (Hydrophilic) Contact Lens

Regulatory Class: Class II Product Code: LPL, MVN Dated: October 23, 2017 Received: October 31, 2017

#### Dear Evan Huang:

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>.

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.

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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.

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="http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm">http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

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/MedicalDevices/DeviceRegulationandGuidance/">https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/</a>) and CDRH Learn (<a href="http://www.fda.gov/Training/CDRHLearn">http://www.fda.gov/Training/CDRHLearn</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="http://www.fda.gov/DICE">http://www.fda.gov/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,

# Denise L. Hampton -S

for Malvina B. Eydelman, M.D.
Director
Division of Ophthalmic and Ear,
Nose and Throat 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)

K171447

Form Approved: OMB No. 0910-0120 Expiration Date: 06/30/2020

Expiration Date: 06/30/2020 See PRA Statement below.

Device Name		
OxyPure Color Silicone Hydrogel Soft Contact Lenses		
Indications for Use (Describe)		
The OxyPure Color Spherical Silicone Hydrogel Soft Contact Lenses are indicated as daily wear single use soft contact lens for the correction of refractive ametropia (myopia and hyperopia) in phakic or aphakic persons with non-diseased eyes who exhibit refractive astigmatism of 1.00D or less where the astigmatism does not interfere with visual acuity.		
Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.		
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		

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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### 510(k) Summary

Company Name: Visco Vision Inc

Company Address: No. 1, Xingye St., Guishan Dist.,

2017.4.17

Taoyuan City, 33341, TAIWAN

Telephone: +886-3-359-6868

Fax: +886-3-349-0202

Contact Person: Evan Huang

**Summary Preparation Date:** 

Trade Name: OxyPure Color Silicone Hydrogel Soft Contact Lenses

Classification Soft (hydrophilic) contact lens.

Name: Regulation 886.5925 Number: Product LPL, MVN

Code: Device Class 2

Class: Panel: Ophthalmic

#### PREDICATE DEVICE:

K141348, VISCO SOFT CONTACT LENS

#### **Device Description**

The OxyPure Color Silicone Hydrogel Soft Contact Lenses is a daily wear lens in spherical design. It may be prescribed as daily wear. It is a copolymer of 1-vinyl-2-pyrrolidinone (NVP) and Siloxane macromer. The water content is 47%. A benzotriazole UV absorbing monomer is used to block UV radiation. OxyPure Color Silicone Hydrogel Soft Contact Lenses contain a pigmented area that will alter or enhance the appearance of the natural iris. The lens is colored with one or more of the following color additives: iron oxides, titanium dioxide, phythalocyanine green and carbazole violet. Lenses are supplied sterile in sealed blister packs containing isotonic buffered saline solution. The compatibility and package integrity of the blister pack packaging system has been demonstrated and successfully used for other marketed lens products, and packaged lenses are effectively steam sterilized in a validated autoclave. Blister pack containers are labeled with the lens parameters, lot number and product expiration date. The expiration date has been established through stability studies that have assessed the chemical stability of the lens and package integrity (ability to maintain sterility). Shelf-life studies are ongoing to establish and extend the labeled expiration date.

## **Intended Use:**



The OxyPure Color Spherical Silicone Hydrogel Soft Contact Lenses are indicated as daily wear single use soft contact lens for the correction of refractive ametropia (myopia and hyperopia) in phakic or aphakic persons with non-diseased eyes who exhibit refractive astigmatism of 1.00D or less where the astigmatism does not interfere with visual acuity.

Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.

All comparison table for applied devices are as following, and the substantial equivalence determination is based on the 510(k) Substantial Equivalence Decision-Making Process Flowchart which includes the comparison and discussion of indications for use, technology, and performance specifications.

Category	OxyPure Color Silicone	VISCO SOFT	Result of
	<b>Hydrogel Soft Contact</b>	CONTACT LENS	Comparasion
	Lenses	K141348	
	New device		
Applicant	Visco Vision Inc	Visco Vision Inc	Same
Classification	class II	class II	Same
Regulation number	886.5925	886.5925	Same
Product code	LPL, MVN	LPL, MVN	Same
	Daily Wear or Daily	Daily Wear or Daily	Same
Indication	Disposable, Soft	Disposable, Soft	
	(hydrophilic) Contact Lens	(hydrophilic) Contact Lens	
	for Myopia, Hyperopia,	for Myopia	
Intended use	The OxyPure Color Spherical	The VISCO Soft	Same
	Silicone Hydrogel Soft	(Hydrophilic) Contact	
	Contact Lenses are indicated	Lenses is indicated for	
	as daily wear single use soft	daily wear for the	
	contact lens for the correction	correction of refractive	
	of refractive ametropia	ametropia (myopia and	
	(myopia and hyperopia) in	hyperopia) in phakic or	
	phakic or aphakic persons	aphakic persons with	
	with non-diseased eyes who	non-diseased eyes who	



Hydrogel Soft Contact Lenses New device  exhibit refractive astigmatism of 1.00D or less where the astigmatism does not interfere with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against	Category	OxyPure Color Silicone	VISCO SOFT	Result of
exhibit refractive astigmatism of 1.00D or less where the astigmatism does not interfere with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  New device  exhibit refractive astigmatism of 2.00D or less where the astigmatism does not interfere with visual acuity. Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only. The VISCO Soft (Hydrophilic) Contact Lenses help protect against		Hydrogel Soft Contact	CONTACT LENS	Comparasion
exhibit refractive astigmatism of 1.00D or less where the astigmatism does not interfere with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  exhibit refractive astigmatism of 2.00D or less where the astigmation of each or less		Lenses	K141348	
of 1.00D or less where the astigmatism does not interfere with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  astigmatism of 2.00D or less where the astigmatism does not interfere with visual acuity. Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		New device		
astigmatism does not interfere with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  Iless where the astigmatism does not interfere with visual acuity. Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		exhibit refractive astigmatism	exhibit refractive	
with visual acuity.  Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  with visual acuity. Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		of 1.00D or less where the	astigmatism of 2.00D or	
Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  Visual acuity. Eyecare practitioners may prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		astigmatism does not interfere	less where the astigmatism	
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prescribe the lens for either single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against			visual acuity. Eyecare	
single-use disposable wear, or for frequent/planned wear, or for replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  single-use disposable wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		Eyecare practitioners may	practitioners may prescribe	
for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  Wear, or for frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only. The VISCO Soft (Hydrophilic) Contact Lenses help protect against		prescribe the lens for either	the lens for either	
replacement wear, with cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  frequent/planned replacement wear, with cleaning, disinfection, and scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		single-use disposable wear, or	single-use disposable	
cleaning, disinfection, and scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		for frequent/planned	wear, or for	
scheduled replacement. When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  Scheduled replacement.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		replacement wear, with	frequent/planned	
prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		cleaning, disinfection, and	replacement wear, with	
replacement, the lens may be disinfected using a chemical disinfection system only.  When prescribed for frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		scheduled replacement. When	cleaning, disinfection, and	
disinfected using a chemical disinfection system only.  frequent replacement, the lens may be disinfected using a chemical disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		prescribed for frequent	scheduled replacement.	
disinfection system only.  lens may be disinfected using a chemical disinfection system only. The VISCO Soft (Hydrophilic) Contact Lenses help protect against		replacement, the lens may be	When prescribed for	
using a chemical disinfection system only. The VISCO Soft (Hydrophilic) Contact Lenses help protect against		disinfected using a chemical	frequent replacement, the	
disinfection system only.  The VISCO Soft (Hydrophilic) Contact Lenses help protect against		disinfection system only.	lens may be disinfected	
The VISCO Soft (Hydrophilic) Contact Lenses help protect against			using a chemical	
(Hydrophilic) Contact Lenses help protect against			disinfection system only.	
Lenses help protect against			The VISCO Soft	
			(Hydrophilic) Contact	
			Lenses help protect against	
transmission of harmful			transmission of harmful	
UV radiation to the cornea			UV radiation to the cornea	
and into the eye.			and into the eye.	
USAN Name Olifilcon A Olifilcon A Same	USAN Name	Olifilcon A	Olifilcon A	Same
FDA Category Group 1 Group 1 Same	FDA Category	Group 1	Group 1	Same
(Group) Non-ionic, Low water Non-ionic, Low water	(Group)	Non-ionic, Low water	Non-ionic, Low water	
Manufacturing Method  Cast Molded  Cast Molded  Same	•	Cast Molded	Cast Molded	Same
Tint process Pad printing No Pad Printing Different	Tint process	Pad printing	No Pad Printing	Different
Print Zone Corresponds to the iris N/A Different	Print Zone	Corresponds to the iris	N/A	Different



Category	OxyPure Color Silicone	VISCO SOFT	Result of
	Hydrogel Soft Contact	CONTACT LENS	Comparasion
	Lenses	K141348	
	New device		
Location of	embedded between HEMA	embedded between HEMA	Same
printing	(Sandwich Process)	(Sandwich Process)	
Lens Design	Spherical	Spherical	Same
Water Content	47%	47%	Same
Light Transmittance	>94%	>94%	Same
Refractive Index	1.410 (hydrated)	1.410 (hydrated)	Same
Oxygen Permeability	150 (Fatt method)	150 (Fatt method)	Same
(DK, 35°C)	(Tutt memou)	(Tutt method)	
Diameter Range	13 to 15 mm	13 to 15 mm	Same
Power Range	- 20.00D to +20.00D in 0.25	- 20.00D to +20.00D in	Same
1 ower runge	steps	0.25 steps	
Center	0.08mm @ -3.00D (Varies	0.08mm @ -3.00D (Varies	Same
Thickness	with Power)	with Power)	
Base Curve	8.0 mm to 9.2 mm	8.0 mm to 9.2 mm	Same
Blue handling tint	No	Yes, reactive Blue19	Different
Color Additives in dye	<ul> <li>Iron oxide</li> <li>Titanium dioxide</li> <li>Phthalocyanine green</li> <li>Carbazole violet</li> </ul>	Reactive Blue19	Different
Leachability	no leachable monomers and addictive residues	no leachable monomers and addictive residues	Same
G: 1 II	No, Frequent/ Planned	No, Frequent/ Planned	Same
Single Use	Replacement	Replacement	
Packaging	Blister Pack	Blister Pack	Same
Packaging	sterile isotonic Borate	sterile isotonic phosphate	Same
Solution	buffered saline	buffered saline	
Sterilization method	Steam	Steam	Same



Category	OxyPure Color Silicone	VISCO SOFT	Result of
	Hydrogel Soft Contact	CONTACT LENS	Comparasion
	Lenses	K141348	
	New device		
Shelf Life	5 years	5 years	Same
Sterility of	$SAL = 10^{-6}$	SAL= 10 <sup>-6</sup>	Same
Device	SAL= 10	SAL= 10	
Tensile strength	0.78±0.2	0.5±0.2	Different
(Mpa)			
Modulus (Mpa)	$0.60 \pm 0.1$	0.60±0.1	Same
Elongation at	195 ± 20%	100± 20%	Different
break (%)			
Toughness	0.87±0.05	0.25±0.05	Different
(J/m3)			
<b>Compliance stan</b>	dard		
	ISO10993-1	ISO10993-1	Same
Diocompotibility	ISO10993-5	ISO10993-5	
Biocompatibility	ISO10993-10	ISO10993-10	
	ISO10993-11	ISO10993-11	
Sterilization and	ISO 17665-1	ISO 17665-1	Same
Shelf life	ISO11737-1	ISO11737-1	
	ISO 11987	ISO 11987	
performance	ISO18369-3	ISO18369-3	Same
	ISO18369-4	ISO18369-4	
	ISO11986	ISO11986	
	ASTM D792-13	ASTM D792-13	

## **Substantial Equivalence Comparison**

The OxyPure Color Silicone Hydrogel Soft Contact Lenses, and the VISCO SOFT CONTACT LENS have same indication, intended use, classification name/ product code, lens design, lens materials/packaging materials and saline, manufacturing and sterilization method, tint process, perfomance parameter ranges, physical properties, mechanical properties, biocompatibility and shelf life. The differences between those two devices are mechanical properties and color additives, but other reference devices have same technical characteristic as new devices to support the substantial equivalence.



#### **Non-clinical tests**

The safety tests, such as biocompatibility have been performed and meet the requirement of following FDA Recognized Consensus Standards.

Regarding the performance, the bench tests were performed in accordance with following FDA Recognized Consensus Standards. All tests passed the requirement to demonstration that new device is as substantial equivalent as the predicate device.

- ISO18369-3 Ophthalmic optics Contact lenses Part 3: Measurement Methods
- ISO18369-4 Ophthalmic optics Contact lenses Part 4: Physicochemical properties of contact lens materials
- ISO18369-2 Ophthalmic optics Contact lenses Part 2: Tolerances
- ISO11986 Ophthalmic optics -- Contact lenses and contact lens care products -- Guidelines for etermination of preservation uptake and release
- ISO11987 Ophthalmic optics -- Contact lenses and contact lens care products Determination of physical compatibility of contact lens care products with contact lenses
- ISO17665-2 terilization Of Health Care Products Moist Heat Part 2: Guidance on the Application of ISO 17665-1. (Sterility)
- ISO17665-1 Sterilization of health care products -- Moist heat -- Part 1: Requirements for the development, validation and routine control of a sterilization process for medical devices
- ISO11980 Ophthalmic optics -- Contact lenses and contact lens care products -- Guidance for clinical investigations
- ASTM D792-13 Standard Test Methods For Density And Specific Gravity (Relative Density) Of Plastics By Displacement. (Materials)

#### **Clinical study**

This 510(k) submission does not utilize clinical study for establishing substantial equivalence therefore this section does not apply.

#### **Conclusions:**

OxyPure Color Silicone Hydrogel Soft Contact Lenses has the same intended use and similar technological characteristics as the above predicate devices. Moreover, information contained in this submission supplied demonstrates that any differences in their characteristics do not raise any new questions of safety or effectiveness. Thus, OxyPure Color Silicone Hydrogel Soft Contact Lenses is substantially equivalent to the predicate devices with respect to its intended use, technological



characteristics and performance characteristics.