

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

March 4, 2016

Smart Performer Corporation Ltd. Mr. Jeffersion Shen QA Department Manager & Management Representative NO. 13-1, Wuquan 1st Rd, Xinzhuang Dist., New Taipei City 242, Taiwan

Re: K151847

Trade/Device Name: Smart Performer (polymacon) soft (hydrophilic) contact lens Regulation Number: 21 CFR 886.5925 Regulation Name: Soft (Hydrophilic) Contact Lens Regulatory Class: Class II Product Code: LPL Dated: January 28, 2016 Received: February 01, 2016

Dear Mr. Shen:

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. 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

<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,

Kesia Alexander

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

Indications for Use Statement

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

Indications for Use

510(k) Number (if known)

K151847

Device Name

SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens

Indications for Use (Describe)

SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is intended to use as correction of refractive myopia in aphakic or non-aphakic persons with non-diseased eyes, who may have 1.00 D of astigmatism or less. The lenses are available with a visibility-handling tint or with a decorative tint intended to enhance or alter the apparent color of the eye.

Eyecare practitioners may prescribe the contact lens for frequent replacement wear, with cleaning, rinsing and disinfection and scheduled replacement as prescribed by the eyecare professional. The contact lens may be disinfected using chemical (not heat) disinfection system.

Note: decorative contact lens is a medical device that can only be used with a valid contact lens prescription.

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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"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

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

510(k) Summary

This summary of 510(k) Safety and Effectiveness information is being submitted in accordance with the requirements of Safe Medical Device Act (SMDA) of 1990 and Title 21 CFR 807.92.

The assigned 510(k) number is <u>K151847</u>.

Submitter Information

| Company | SMART PERFORMER CORP. LTD. | | |
|-----------------|---|--|--|
| | No.13-1, Wuquan 1st Rd., Xinzhuang Dist., New Taipei City 242, Taiwan | | |
| | (R.O.C.) | | |
| Contact Person | Jeffersion Shen | | |
| | QA Dept. Manager & Management Representative | | |
| Telephone | 886-2-22999699 | | |
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| E mail | jeffersion@smartvision.tw | | |
| Date of Summary | June 15, 2015 | | |

Device Information

| Name of Device | SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens |
|-------------------|---|
| Common Name | Soft (hydrophilic) contact lens, daily wear |
| Classification | Class II |
| Regulation Number | 886.5925 |
| Product Code | LPL |
| Review Panel | Ophthalmic Devices |

Predicate Device

- EZvue (Polymacon) Soft (hydrophilic) Contact Lens for Daily Wear, K082883, submitted by I-SEE VISION TECHNOLOGY INC.
- Natural Touch (polymacon) Soft (hydrophilic) Contact Lens, K001089, submitted by Aspect Vision Care, Ltd.
- ACUVUE 2 COLOURS Brand (etafilcon A) Contact Lens with UV blocker, K010114, submitted by VISTAKON, Division of Johnson & Johnson Vision Care, Inc.

Intended Use

SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is intended to use as correction of refractive myopia in aphakic or non-aphakic persons with non-diseased eyes, who may have 1.00 D of astigmatism or less. The lenses are available with a visibility-handling tint or with a decorative tint intended to enhance or alter the apparent color of the eye.

Eyecare practitioners may prescribe the contact lens for frequent replacement wear, with cleaning, rinsing and disinfection and scheduled replacement as prescribed by the eyecare professional. The contact lens may be disinfected using chemical (not heat) disinfection system.

Device Description

The SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is available as spherical lenses manufactured by cast molded method. The lens is made from a lens material that is approximately 38% water. The hydrogel lens' material is a copolymer composed of 2-hydroxyethyl methacrylate (HEMA), which was cross-linked with ethyleneglycol dimethacrylate (EGDMA) via UV photo-polymerization.

The SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is tinted blue using Reactive Blue Dye #19 to make the lenses more visible for handling. The cosmetically tinted lens is tinted in an annular pattern, providing a clear optic zone. The lens is colored with one or more of the following "list" color additives: iron oxides (red), titanium dioxide, C.I. Pigment green 7, C.I. Reactive blue 19, D&C Yellow 10 and Phthalocyaninato(2-) copper. The lens is available in the following colors: BLACK, BLUE, GRAY, GREEN, BROWN, PINK, and VIOLET. The lens is supplied sterile in sealed blister packers containing sterile isotonic phosphate buffered saline. The Lens designs in the following parameter ranges:

| 13.8 mm to 14.8 mm | | | | |
|---|--|--|--|--|
| 0.060 mm to 0.250 mm (varies with power) | | | | |
| 8.2 mm to 9.0 mm | | | | |
| -0.25D to -12.00 D | | | | |
| The Lens designs in the following physical properties: | | | | |
| 1.430 | | | | |
| 38.0% | | | | |
| $11 \text{ x } 10^{-11} \text{ (cm}^2\text{/sec)} \text{ (ml O}_2\text{/ml x mm Hg) at } 35^{\circ}\text{C}$ | | | | |
| >93% | | | | |
| | | | | |

Non-Clinical Studies

The following tests were conducted as recommended by the Premarket Notification 510 (k) Guidance Document for Daily Wear Contact Lenses, revised May 1994.

- (a). Biocompatibility (cytotoxicity, ocular irritation, skin sensitization and acute systemic toxicity)
- (b). Physicochemical Testing
- (c). Stability Testing

Clinical Studies

Polymacon lenses have been used widely. Their safety and effectiveness have been well

documented. Their safety and effectiveness can be further exemplified by two lenses cleared by FDA

- EZvue (Polymacon) Soft (hydrophilic) Contact Lens for Daily Wear, K082883
- Natural Touch (polymacon) Soft (hydrophilic) Contact Lens, K001089

Clinical studies for SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens are not required for premarket notification as the USAN name and process are the same as the above mentioned predicate devices.

Substantial Equivalence Summary

Information submitted in the 510(k) establishes that the SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens has comparable physicochemical properties to the predicate devices and do not raise questions of safety and effectiveness. Shelf life testing has shown the lenses remain sterile and that lens properties do not change before the expiration date. Results of cytotoxicity, ocular irritation, skin sensitization and acute systemic toxicity showed the SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is substantially equivalent to the predicate devices in safety and biocompatibility. Therefore, the SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is substantially equivalent to the predicate devices.

| Substantial Equivalence Comparison | | | | | | | |
|------------------------------------|---|--|--|--|--|--|--|
| Device | SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens | EZvue (Polymacon) Soft (hydrophilic) Contact Lens for Daily Wear | Natural Touch (polymacon) Soft (hydrophilic) Contact Lens | ACUVUE 2 COLOURS Brand (etafilcon A) Contact Lens with UV blocker | | | |
| Material (USAN name) | Polymacon | Polymacon | Polymacon | Etafilcon A | | | |
| Indication for use | correction of refractive ametropia | correction of refractive ametropia | correction of refractive ametropia | correction of refractive ametropia | | | |
| Manufacturing Method | Cast Molded | Cast Molded | Cast Molded | Cast Molded | | | |
| Water Content | 38% | 38% | 38% | 58% | | | |
| Light Transmittance | >93% | >93% | >97% | >70% | | | |
| Dk (35 °C) | 11 x 10 ⁻¹¹ | 9 x 10 ⁻¹¹ | 8 x 10 ⁻¹¹ | 21.4 x 10 ⁻¹¹ | | | |
| Refractive Index | 1.430 | 1.430 | 1.44 | 1.40 | | | |
| Toxicity | Non-Toxic | Non-Toxic | Non-Toxic | Non-Toxic | | | |
| Color Additives | Iron oxides (red)Titanium Dioxide | • Reactive blue dye #19 | iron oxidestitanium dioxide | iron oxidestitanium dioxide | | | |

| • C.I. Pigment gree | en 7 | • aluminum oxide | • Reactive blue dye 4 |
|---------------------|-------|-------------------|------------------------|
| • C.I. Reactive blu | e 19 | • chromium-cobalt | • Vat orange 1 |
| Phthalocyaninate | 0(2-) | | • Phthalocyanine Green |
| copper | | | • Phthalocyaninato(2-) |
| • D&C Yellow 10 | | | copper |

Conclusion

A series of pre-clinical tests were performed to demonstrate the safety and effectiveness of the SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens and to establish substantial equivalence to the predicate devices. Information submitted in the 510(k) also establishes that the lens do not raise questions of safety and effectiveness. Therefore, the SMART PERFORMER (Polymacon) Soft (Hydrophilic) Contact Lens is substantially equivalent to the predicate devices.