# CooperVision AQUALENS 24H NXT SPHERICAL (fanfilcon A) Soft (Hydrophilic) Daily Wear Soft Contact Lenses

**IMPORTANT:** Please read carefully and keep this information for future use. This package insert is intended for the eye care practitioner, but should be made available to patients upon request. The Eye Care Practitioner should provide the patient with the patient instructions that pertain to the patient's prescribed lens.

# SYMBOLS KEY:

The following symbols may appear on the label or carton.

SYMBOL	DEFINITION	Reference	
R ONLY	Caution: Federal (USA) law restricts this device to sale by or on the order of a licensed practitioner	81 FR 38911	
$\triangle$	Caution / See Instructions for Wearers	BS EN ISO 15223-1 Table 1, Symbol 5.4.4	
$\mathbf{\Sigma}$	Use by Date (expiration date)	BS EN ISO 15223-1 Table 1, Symbol 5.1.4	
LOT	Batch Code	BS EN ISO 15223-1 Table 1, Symbol 5.1.5	
STERILE	Sterile using Steam Heat	BS EN ISO 15223-1 Table 1, Symbol 5.2.5	
	Manufacturer	BS EN ISO 15223-1 Table 1, Symbol 5.1.1	
EC REP	Authorized representative in the European Community	BS EN ISO 15223-1 Table 1, Symbol 5.1.2	
$\otimes$	Do not use if package is damaged	BS EN ISO 15223-1 Table 1, Symbol 5.2.8	
i	Consult instructions for use / consult electronic instructions for use	BS EN ISO 15223-1 Table 1, Symbol 5.4.3	
~~~	Date of manufacture	BS EN ISO 15223-1 Table 1, Symbol 5.1.3	

# CAUTION: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A LICENSED PRACTITIONER.

# DESCRIPTION

The **AQUALENS 24H NXT SPHERICAL** material (fanfilcon A) is primarily a random copolymer of polydimethylsiloxane methacrylate and vinylmethyl acetamide. The lenses have a blue tint which is added to make the lens more visible for handling. The lenses also contain a UV absorbing monomer, benzotriazolyl methacrylate, which is used to block UV radiation.

AQUALENS 24H NXT SPHERICAL (fanfilcon A) contact lenses parameters:

<ul> <li>Diameter:</li> </ul>	14.2 mm
<ul> <li>Base Curve:</li> </ul>	8.4 mm
<ul> <li>Center Thickness:</li> </ul>	(varies wi

- Powers:
- (varies with power) -20.00 D to +20.00 D

The physical/optical properties of the lens are:

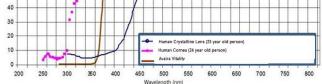
- Specific Gravity
- Refractive Index:
- Light Transmittance: 98% +2/-5%
- Surface Character Hydrophilic
- Water Content  $55\% \pm 2\%$
- Oxygen Permeability 90x10<sup>-11</sup> [(cm<sup>2</sup>/sec)x(ml O<sub>2</sub>)/(ml x mm Hg)]

 $1.398 \pm 0.005$ 

Call our Customer Service Department at (800) 341-2020

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 Lerman, S., Radiant Energy and the Eye, MacMillan, New York, 1980, p. 58, figure 2-21
 Waxler M., Hitchins, V.M., Optical Radiation and Visual Health, CRC Press, Boca Raton, Florida, 1986, p. 10, figure 5

**WARNING:** UV-absorbing contact lenses are NOT substitutes for protective UV absorbing eyewear, such as UV absorbing goggles or sunglasses because they do no completely cover the eye and the surrounding area. You should continue to use absorbing eyewear as directed.

Long term exposure to the UV radiation is one of the risk factors associated with cataracts. Exposure is based on a number of factors such as environmental conditions (altitude, geography, cloud cover) and personal factors (extent and nature of the outdoor activities). UVabsorbing contact lenses help provide protection against harmful UV radiation. However, clinical studies have not been done to demonstrate that wearing UV-absorbing contact lenses reduces the risk of developing cataracts or other eye disorders. Consult your Eye Care Practitioner for more information.

The AQUALENS 24H NXT SPHERICAL (fanfilcon A) Soft (Hydrophilic) Contact Lens (-6.00 D) blocks >90% of UVA radiation and >99% UVB radiation average across the spectrum. The radiation blockage of the AQUALENS 24H NXT SPHERICAL soft contact lens will increase for thicker lenses.

# ACTIONS

When placed on the cornea in its hydrated state, the AQUALENS 24H NXT SPHERICAL Soft (Hydrophilic) Contact Lens acts as a refracting medium to focus light rays on the retina.

# INDICATIONS FOR USE

AQUALENS 24H NXT SPHERICAL (fanfilcon A) Soft Contact lenses are indicated for the correction of ametropia (myopia and hyperopia) in aphakic and non-aphakic persons with non-diseased eyes in powers from -20.00 to +20.00 diopters. The lenses may be worn by persons who exhibit astigmatism of 2.00 diopters or less that does not interfere with visual acuity.

Eye Care Practitioners may prescribe the Aqualens 24H NXT Spherical (fanfilcon A) Soft Contact lenses for frequent/planned replacement wear up to one month, with cleaning, disinfection and scheduled replacement or for single-use disposable wear.

When prescribed for frequent/planned replacement, the Aqualens 24H NXT Spherical (fanfilcon A) Soft Contact lens is to be cleaned, rinsed and disinfected each time the lens is removed. The contact lens is to be discarded after the recommended wearing period as prescribed by the Eye Care Professional. When prescribed for frequent/planned replacement wear, the lenses may be disinfected using a chemical disinfection only.

When prescribed for single-use disposable wear, the Aqualens 24H NXT Spherical (fanfilcon A) Soft Contact lens is to be discarded after each removal.

# CONTRAINDICATIONS (REASONS NOT TO USE):

Do not use the **AQUALENS 24H NXT SPHERICAL** lens when any of the following conditions exist:

- Acute and subacute inflammation or infection of the anterior chamber of the eye.
- Any eye disease, injury, or abnormality that affects the cornea, conjunctiva, or eyelids.
- Severe insufficiency of lacrimal secretion (dry eyes).
- o Corneal hypoesthesia (reduced corneal sensitivity), if not aphakic.
- Any systemic disease that may affect the eye or be exaggerated by wearing contact lenses.
- Allergic reactions of ocular surfaces or adnexa that may be induced or exaggerated by wearing contact lenses.
- Allergy to any ingredient, such as mercury or thimerosal, in a solution, which is to be used to care for any AQUALENS 24H NXT SPHERICAL lens.
- o Any active corneal infection (bacterial, fungal, or viral).
- o If eyes become red or irritated.
- The patient is unable to follow lens care regimen or unable to obtain assistance to do so.

# WARNINGS:

# PROBLEMS WITH CONTACT LENSES AND LENS CARE PRODUCTS COULD RESULT IN SERIOUS INJURY TO THE EYE.

It is essential that the patient follows the directions of the Eye Care Practitioner and all labeling instructions for proper use of contact lenses and lens care products, including the lens case.

Patients should be advised of the following instructions for use and warnings pertaining to contact lens wear:

# i. Soaking and Storing the Lenses

#### Instruction for Use:

Use only fresh multi-purpose (contact lens disinfecting) solution each time the patient soaks (stores) the lenses.

# WARNING:

Do not reuse or "top off" old solution left in the lens case since solution reuse reduces effective lens disinfection and could lead to severe infection, vision loss or blindness.

"Topping-Off" is the addition of fresh solution to solution that has been sitting in the case.

### ii. Rub and Rinse Time

#### Instruction for Use:

 Rub and rinse the lenses according to the recommended lens rubbing and rinsing times in the labeling of the multipurpose solution to adequately disinfect the lenses.

#### WARNING:

- Rub and rinse the lenses for the recommended amount of time to help prevent serious eye infections.
- Never use water, saline solution, or rewetting drops to disinfect the lenses. These solutions will not disinfect the lenses. Not using the recommended disinfectant can lead to severe infection, vision loss or blindness.

#### iii. Lens Case Care

#### Instruction for Use:

- Empty and clean contact lens cases with digital rubbing using fresh, sterile disinfecting solutions/contact cleaner. Never use water. Cleaning should be followed by rinsing with fresh, sterile disinfecting solutions (never use water) and wiping the lens cases with fresh, clean tissue is recommended. Never air-dry or recap the lens case lids after use without any additional cleaning methods. If air drying, be sure that no residual solution remains in the case before allowing it to dry.
- Replace the lens case according to the directions given by the eye care professional or the labeling that came with the case.
- Contact lens cases can be a source of bacterial growth.

# WARNING:

Do not store the lenses or rinse the lens case with water or any non-sterile solution. Only use fresh multi-purpose solution to not contaminate the lenses or lens case. Use of non-sterile solution can lead to severe infection, vision loss or blindness.

# iv. Water Activity

# Instruction for Use:

Do not expose the contact lenses to water while wearing them. WARNING:

Water can harbor microorganisms that can lead to severe infection, vision loss or blindness. If the lenses have been submersed in water when swimming in pools, lakes or oceans, discard them and replace them with a new pair. Ask the Eye Care Practitioner (professional) for recommendations about wearing the lenses during any activity involving water.

# v. Discard Date on Multi-Purpose Solution Bottle

#### Instruction for Use:

- Discard any remaining solution after the recommended time period indicated on the bottle of multi-purpose solution used for disinfecting and soaking the contact lenses.
- The Discard date refers to the time to safely use contact lens care product after the bottle has been opened. It is not the same as the expiration date, which is the last date that the product is still effective before it is opened.

# WARNING:

Using the multi-purpose solution beyond the discard date could result in contamination of the solution and can lead to severe infection, vision loss or blindness.

To avoid contamination, DO NOT touch tip of container to

any surface. Replace cap after using.

• To avoid contaminating the solution, DO NOT transfer to other bottles or containers.

# EYE PROBLEMS, INCLUDING CORNEAL ULCERS, CAN DEVELOP RAPIDLY AND LEAD TO LOSS OF VISION; IF THE FOLLOWING IS EXPERIENCED:

- Eye Discomfort,
- Excessive Tearing,
- Vision Changes,
- Loss of Vision,
- Eye Redness,
- Or Other Eye Problems

PATIENTS SHOULD BE INSTRUCTED TO IMMEDIATELY REMOVE THE LENSES, AND PROMPTLY CONTACT THE EYE CARE PRACTITIONER.

- Daily wear lenses are not indicated for overnight wear, and patients should be instructed not to wear lenses while sleeping. Clinical studies have shown that risk of serious adverse reactions is increased when these lenses are worn overnight.
- Studies have shown that contact lens wearers who are smokers have a higher incidence of adverse reactions than nonsmokers.
- Patients should be cautioned that proper use and care of the contact lenses and lens care products, including lens cases, are essential for the safe use of these products. It is essential that patients follow their Eye Care Practitioner's directions and all labeling instructions for proper use of lenses and lens care products. Patients should fill their lens case with fresh solution every time they store their lenses, and never re-use solution. Additionally, they should clean and rinse their lens case between uses as recommended by their Eye Care Practitioner. Eye problems, including corneal ulcers, can develop rapidly and lead to loss of vision.
- The result of a study<sup>1</sup> indicate the following:
  - a. The overall annual incidence of ulcerative keratitis in daily wear contact lens users is estimated to be about 4.1 per 10,000 persons and about 20.9 per 10,000 persons in extended wear contact lens users.
  - b. The risk of ulcerative keratitis is 4 to 5 times greater for extended wear contact lens users than for daily wear users. When daily wear users who wear their lenses overnight and extended wear users who wear their lenses on a daily basis are excluded from the comparison, the risk among extended wear users are 10 to 15 times greater than among daily wear users.
  - c. When daily users wear their lenses overnight (outside the approved indication), the risk of ulcerative keratitis is 9 times greater than among those who do not wear them overnight.
  - d. The overall risk of ulcerative keratitis may be reduced by carefully following directions for lens care, including cleaning the lens case.
  - e. The risk of ulcerative keratitis among contact lens users who smoke is estimated to be 3 to 8 times greater than among non-smokers.
  - f. If patients experience eye discomfort, excessive tearing, vision changes, redness of the eye or other problems, they should be instructed to immediately remove their lenses and promptly contact their Eye Care Practitioner. It is recommended that contact lens wears see their Eye Care Practitioner routinely as directed.

# PRECAUTIONS

# **Special Precautions for Eye Care Practitioners**

- Due to the small numbers of patients enrolled in clinical investigation of lenses, all refractive powers, design configurations, or lens parameters available in the lens material are not evaluated in significant numbers. Consequently, when selecting an appropriate lens design and parameters, the Eye Care Practitioner should consider all characteristics of the lens that can affect lens performance and ocular health, including oxygen permeability, wettability, central and peripheral thickness, and optic zone diameter.
- The potential impact of these factors on the patient's ocular health should be carefully weighed against the patient's need for refractive correction; therefore, the continuing ocular health of the patient and lens performance on the eye should be carefully monitored by the prescribing Eye Care Practitioner.
- Patients who wear aspheric contact lenses to correct presbyopia may not achieve the best corrected visual acuity for either far or near vision. Visual requirements vary with the individual and should be considered when selecting the most appropriate type of lens for each patient.
- Aphakic patients should not be fitted with any AQUALENS 24H NXT SPHERICAL contact lenses until the determination is made that the eye has healed completely.
- Fluorescein, a yellow dye, should not be used while the lenses are on the eyes. The lenses absorb the dye and become discolored. Whenever fluorescein is used in the eyes, the eyes should be flushed with a sterile saline solution that is recommended for in-eye use.
- Before leaving the Eye Care Practitioner's office, the patient should be able to promptly remove the lenses or should have someone else available who can remove the lenses for him or her. Eye Care Practitioners should instruct the patient to remove the lenses immediately if the eye becomes red or irritated.

Eye Care Practitioners should carefully instruct patients about the following safety precautions:

- Always discard disposable lenses after the recommended wearing schedule prescribed by the Eye Care Practitioner.
- Different solutions cannot always be used together, and not all solutions are safe for use with all lenses. Use only recommended solutions.
- Never use solutions recommended for conventional hard contact lenses only.
- Chemical disinfection solutions should not be used with heat unless specifically indicated on product labeling for use in both heat and chemical disinfection.
- Do not use saliva or any solutions for lubricating or wetting lenses.
- If the lens sticks (stops moving) on the eye, follow the recommended directions on Care for a Sticking Lens. The lens should move freely on the eye for the continued health of the eye. If non-movement of the lens continues, the patient should be instructed to **immediately** consult his or her Eye Care Practitioner.
- Always wash and rinse hands before handling lenses. Do not get cosmetics, lotions, soaps, creams, deodorant, or sprays in the eyes or on the lenses. It is best to put on lenses before putting on makeup. Water-based cosmetics are less likely to damage lenses than oil-based products.
- Do not touch the contact lenses with the finger or hands if the hands are not free of foreign materials, as lens damage may occur.
- Carefully follow the handling, insertion, removal, and wearing instructions in the Patient Instructions for AQUALENS 24H NXT SPHERICAL contact lenses and those prescribed by the Eye Care Practitioner.
- $\circ$   $% \ensuremath{\mathsf{Never}}$  Never wear lenses beyond the period recommended by the Eye Care Practitioner.
- If aerosol products such as hairspray are used while wearing lenses, exercise caution and keep eyes closed until the spray has settled.
- Always handle lenses gently and avoid dropping them.

<sup>1</sup>NewEnglandJournalofMedicine,September21,1989;321(12),pp.773-783

- Avoid all harmful or irritating vapors and fumes while wearing lenses.
- Ask the Eye Care Practitioner about wearing the lenses during sporting activities.
- Inform the doctor (health care practitioner) about being a contact lens wearer.
- Never use tweezers or other tools to remove lenses from the lens container unless specifically indicated for that use. Pour the lens into your hand.
- Do not touch the lens with fingernails.
- Always contact the Eye Care Practitioner before using any medicine in the eyes.
- Always inform the employer of being a contact lens wearer. Some jobs may require use of eye protection equipment or may require that the patient not wear contact lenses.
- As with any contact lens, follow-up visits are necessary to assure the continuing health of the patient's eyes. The patient should be instructed as to a recommended follow-up schedule.

# ADVERSE REACTIONS

The patient should be informed that the following problems may occur:

- Eyes stinging, burning, or itching (irritation), or other eye pain.
- o Comfort is less than when the lens was first placed on the eye.
- Feeling that something is in the eye such as a foreign body or a scratched area.
- Excessive watering (tearing) of the eyes.
- Unusual eye secretions.
- Redness of the eyes.
- Reduced sharpness of vision (poor visual acuity).
- Blurred vision, rainbows, or halos around objects.
- Sensitivity to light (photophobia).
- Dry eyes.

If the patient notices any of the above, he or she should be instructed to:

# • Immediately remove the lenses.

 If the discomfort or the problem stops, then look closely at the lens. If the lens is in some way damaged, do not put the lens back on the eye. Place the lens in a storage case and contact the Eye Care Practitioner. If the lens has dirt, an eyelash, or other foreign body on it, or the problem stops and the lens appears damaged, the patient should thoroughly clean, rinse, and disinfect the lenses; then reinsert them. After reinsertion, if the problem continues, the patient should immediately remove the lenses and consult the Eye Care Practitioner.

When any of the above problems occur, a serious condition such as infection, corneal ulcer, neovascularization, or iritis may be present. The patient should be instructed to **keep the lens off the eye and seek immediate** professional identification of the problem and prompt treatment to avoid serious eye damage.

# FITTING

Conventional methods of fitting contact lenses apply to all **AQUALENS 24H NXT SPHERICAL** contact lenses.

# WEARING SCHEDULE

The wearing schedule should be determined by the Eye Care **Practitioner.** Patients tend to over-wear the lenses initially. The Eye Care Practitioner should emphasize the importance of adhering to the initial maximum wearing schedule. Regular checkups, as determined by the Eye Care Practitioner are also extremely important.

CooperVision recommends that all **AQUALENS 24H NXT SPHERICAL** lenses be discarded and replaced with a new lens on a frequent replacement basis (up to a month). The Eye Care Practitioner is encouraged to determine an appropriate lens replacement schedule based upon the response of the patient.

DAILY WEAR: (less than 24 hours, while awake). The maximum suggested wearing time is:

Day	Hours	Day	Hours
1	6	4	12
2	8	5	14
3	10	6	All waking hours

The Eye Care Practitioner should determine the wearing and replacement schedule, based upon the patient's history and their ocular examination, as well as the practitioner's experience and clinical judgment.

# LENS CARE DIRECTIONS

Eye Care Practitioners should review with the patient lens care directions, including basic lens care information in accordance with patients lens type and wearing schedule.

- Always wash, rinse, and dry hands before handling contact lenses.
- Do not use saliva or any solutions for lubricating or rewetting. Do not put lenses in the mouth.
- The patient should always have a spare pair of lenses at all times.
- Eye Care Practitioners may recommend a lubrication/rewetting solution, which can be used to wet (lubricate) the lenses while they are being worn to make them more comfortable.

# General Lens Care: (For Frequent Replacement Lenses Only) Basic Instructions:

- o This section is NOT applicable for daily wear disposable lenses.
- Always use fresh, unexpired lens care solutions.
- Use the recommended chemical (not heat) system of lens care and carefully follow instructions on solution labeling. Different solutions cannot always be used together, and not all solutions are safe to use with all lenses. Do not alternate or mix lens care systems unless indicated on solution labeling.
- Lenses should be cleaned, rinsed, and disinfected each time they are removed.
- Cleaning and rinsing are necessary to remove mucus and film from the lens surface. Disinfecting is necessary to destroy harmful germs.
- Always remove, clean, rinse, (as recommended by the eye care practitioner) and disinfect lenses according to the schedule prescribed by the Eye Care Practitioner. The use of an enzyme cleaner is not recommended.
- The eye care practitioner should recommend a care system that is appropriate for AQUALENS 24H NXT SPHERICAL contact lenses. Each lens care product contains specific directions for use and important safety information, which should be read and carefully followed.

Note: Some solutions may have more than one function, which will be indicated on the label. Read the label on the solution bottle and follow directions.

- Clean one lens first (always the same lens first to avoid mix-ups), rinse the lens thoroughly with recommended saline or disinfection solution to remove cleaning solution, mucus, and film from the lens surface, and put that lens into the correct chamber of the lens storage case. Then repeat the procedure for the second lens.
- After cleaning, and rinsing, disinfect lenses using the system recommended by the manufacturer and/or Eye Care Practitioner.
- To store lenses, disinfect and leave them in the closed/unopened case until ready to wear. If lenses are not to be used immediately following disinfection, the patient should be instructed to consult the package insert or the Eye Care Practitioner for information on the storage of lenses. After removing the lenses from the lens case, empty, and rinse the lens storage case with solution as recommended by the lens case manufacturer; then allows the lens case to air dry. When the lens case at regular intervals as recommended by the lens case manufacturer or your Eye Care Practitioner.

• Eye Care Practitioners may recommend a lubrication/rewetting solution, which can be used to wet (lubricate) the lenses while they are being worn to make them more comfortable.

# CHEMICAL LENS DISINFECTION (Including Hydrogen Peroxide - For Frequent Replacement Lenses Only):

- This section is NOT applicable for daily wear disposable lenses.
- Clean the contact lenses with a recommended cleaning solution and thoroughly rinse them with a recommended rinsing solution. After cleaning and rinsing, to disinfect, carefully follow the instructions accompanying the disinfecting solution in the eye care regimen recommended by the lens manufacturer or the Eye Care Practitioner.
- When using hydrogen peroxide lens care systems, lenses must be neutralized before wearing. Follow the recommendations on the hydrogen peroxide system labeling.
- Thoroughly rinse lenses with a fresh solution recommended for rinsing before inserting and wearing or follow the instructions on the disinfection solution labeling.
- Do not heat the disinfection solution and lenses.
- Leave the lenses in the unopened storage case until ready to put on the eyes.
- CAUTION: Lenses that are chemically disinfected may absorb ingredients from the disinfecting solution which may be irritating to the eyes. A thorough rinse in fresh sterile saline solution prior lo placement in the eye should reduce the potential for irritation.
- When using hydrogen peroxide lens care systems, the patient should be instructed to use ONLY the lens case provided with the hydrogen peroxide care system. This case is specially designed to neutralize the solution. The patient should be advised that failure to use the specialized case will result in severe stinging, burning, and injury to the eye. The patient should be instructed to follow the recommendations on the hydrogen peroxide system labeling exclusively. Following disinfection with a peroxide system, the lenses should be rinsed with sterile saline.

# LENS CASE CLEANING AND MAINTENANCE

Contact lens cases can be a source of bacteria growth. Lens cases should be emptied, cleaned, and rinsed with solution recommended by the lens case manufacturer, and allowed to air dry. Lens cases should be replaced at regular intervals as recommended by the lens case manufacturer or the Eye Care Practitioner.

# CARE FOR A DRIED OUT (DEHYDRATED) LENS

If any **AQUALENS 24H NXT SPHERICAL** lens is exposed to air while off the eye, it may become dry and brittle. In this event, simply dispose of the lens and replace with a fresh one.

# CARE FOR A STICKING (NONMOVING) LENS

If the lens sticks (stops moving or cannot be removed), the patient should be instructed to apply 2 to 3 drops of the recommended lubricating or rewetting solution directly to the eye and wait until the lens begins to move freely on the eye before removing it. If non-movement of the lens continues more than 5 minutes, the patient should immediately consult the Eye Care Practitioner.

# EMERGENCIES

The patient should be informed that if chemicals of any kind (household products, gardening solutions, laboratory chemicals, etc.) are splashed into the eyes, the patient should: FLUSH THE EYES IMMEDIATELY WITH TAP WATER AND IMMEDIATELY CONTACT THE EYE CARE PRACTITIONER OR VISIT A HOSPITAL EMERGENCY ROOM WITHOUT DELAY.

# HOW SUPPLIED

Each lens is supplied sterile in a blister containing buffered saline solution. The blister is labeled with the base curve, diameter, dioptic power, manufacturing lot number and expiration date of the lens, and the presence of a UV-blocker is noted. When applicable, the lens is also labeled with the add power, cylinder power and cylinder axis.

# DO NOT USE IF THE BLISTER IS BROKEN OR THE SEAL HAS BEEN DAMAGED

# REPORTING OF ADVERSE REACTIONS

All serious adverse experiences and adverse reactions observed in patients wearing the **AQUALENS 24H NXT SPHERICAL** contact lens or experienced with any lenses should be reported to:

