# The Basics of Contact Lenses

A quick reference guide to understanding the fundamentals

## The Opportunity

For every one US contact lens wearer, 2.4 people who need vision care are open to wearing contact lenses.<sup>1</sup>

### Some reasons people wear contact lenses<sup>2,3,4</sup>



Spherical or toric lens?

Hyperopia

Difficulty focusing

at near.

Patients without astigmatism but with myopia and/or hyperopia are fit with spherical contact lenses. However, patients with astigmatism may require a specific type of contact lens often referred to as a toric lens. In addition, those patients who are also presbyopic may require a *multifocal* contact lens, which is available in spherical and toric options.

Astigmatism

Irregular corneal or lenticular

shape causes blurriness at

various distances.

## How to Read a Contact Lens Prescription



🗸 🗖 Fxample

**Myopia** 

Difficulty focusing

on distant objects.

Spherical Power: The "-" indicates the patient is myopic. A "+" in this position would be used for a hyperopic patient.

Presbyopia

Loss of flexibility of the

crystalline lens causes

difficulty focusing at near.

PATIENT NAME: Sara Lookman					
Brand: ACUVUE® OASYS MAX 1-Day					
	POWER	CYL	AXIS	BC	DIA
RIGHT (OD)	-4.50	DS		8.5	14.3
LEFT (OD)	-4.50	DS		8.5	14.3
EXAM DATE: EXPIRATION DATE:					

- Diopter Sphere (DS): Indicates there is no cylindrical (cyl) component to the prescription, or rather, the patient does not have a level of astigmatism that constitutes the need for astigmatic correction or a contact lens for astigmatism. If the patient were astigmatic and being prescribed a contact lens for astigmatism, the value of the cyl typically falls between -0.75D and -2.75D in 0.75D increments which could depend upon contact lens brand
- Axis: The orientation of the cylindrical (cyl) power. This field is empty because there is no astigmatic correction or cylinder power. If cylindrical power is present, the value of the axis generally falls between 010 and 180 typically in increments of 10, although this is dependent upon the lens selected and available parameters.
- Base Curve (BC): Represents the inside curvature or back surface curvature of the contact lens. Typically, the larger the number, the flatter the lens.
- Diameter (DIA): Width of the lens in millimeters.

### Lens Replacement Schedules



### **Technologies**

The ACUVUE® Brand of Contact Lenses is inspired by the natural function of the eye based on deep understanding of patient needs. Understanding these technologies may help you answer questions patients might have about these lens features.



### **Moisture Infused for Hydration<sup>5</sup>**

Inspired by the structure and function of the natural tear-film, ACUVUE® soft contact lenses are embedded with long-chain polyvinyl pyrrolidone (PVP) to mimic tear film mucins to help infuse and maintain moisture and integrate natural tear film components.\*6,7,8

\*ACUVUE 2 does NOT contain PVP

#### PUPIL OPTIMIZED Design<sup>5,9</sup>

For multifocal vision and inspired by the natural eye and pupil size in relation to age and refractive error, Johnson & Johnson scientists created 183 pupil-optimized designs to match the presbyopic pupil size as it changes across the refractive error and age ranges.<sup>9</sup>



#### **BLINK STABILIZED® Design for Astigmatism**<sup>5,10</sup>

Inspired by the need for astigmatism patients to maintain clear, stable vision, the scientists at Johnson & Johnson developed a unique BLINK STABILIZED® design, that helps keep the lens in place, even with extensive eye and head movements.<sup>10</sup>



#### UV BLOCKING<sup>^\*\*5</sup>

ACUVUE® contact lenses are the only major brand which blocks at least 97% of UVB and 82% of UVA rays, as standard across the entire product line.^\*\*11



#### **OptiBlue™ Filter**

The OptiBlue<sup>™</sup> Technology in the ACUVUE<sup>®</sup> OASYS MAX Family filters 60% blue-violet light -the highest level in the industry.

<sup>†</sup>Filtering of high-energy visible light by contact lenses has not been demonstrated to confer any health benefit to the user, including but not limited to retinal protection, protection from cataract progression, reduced eye strain, improved contrast, improved acuity, reduced glare, improved low light vision, or improved circadian rhythm/sleep cycle. An eye care professional should be consulted for more information.

<sup>‡</sup> Versus publicly available information for standard daily use contact lenses as of June 2023

"Helps protect against transmission of harmful UV radiation to the cornea & into the eye.

\*WARNING: UV-absorbing contact lenses are NOT substitutes for protective eyewear such as UV-absorbing goggles or sunglasses because they do not completely cover the eye and surrounding area. You should continue to use UV-absorbing eyewear as directed. Note: Long-term exposure to 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 outdoor activities). UV-blocking contact lenses help provide protection against harmful UV radiation. However, clinical studies have not been done to demonstrate that wearing UV-blocking contact lenses reduces the risk of developing cataracts or other eye disorders. Consult your eye care practitioner for more information. Unlike sun protection for the skin, the UV-blocking ingredient in ACUVUE contact lenses is incorporated into the material permanently—it won't wear off. It's important to remember that sunglasses are still an essential part of protecting your eyes from UV.

## How to talk to patients about lens care

#### Proper hygiene and handling-this cannot be stressed enough to patients.

Hand washing is critical before and after handling a contact lens to reduce the risk of contamination which



can lead to eye infections or other complications. It is also important for patients to practice proper lens cleaning and storage, which includes using fresh solution each night to clean and store lenses, while regularly changing their contact lens storage case.



Multi-Purpose Solution is an all-in-one lens care system with a single solution used for rinsing, cleaning, disinfecting, and lens storage.<sup>14</sup> This offers a convenient, all-in-one care solution.

One-Step Hydrogen Peroxide Hydrogen Systems clean, disinfect, and store contact lenses and may be ideal for patients with sensitivities.<sup>15§</sup>

<sup>\$</sup>Placing hydrogen peroxide solution directly in the eyes or on the contacts before insertion may cause stinging, burning, irritation, or eye damage. The hydrogen peroxide solution MUST be neutralized to avoid eye damage. This may take up to 6 hours depending on the solution used, and patients should always read the instructions on the solution packaging before use.

Sources:
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8. JJV Data on File 2022. CSM-ACUVUE® PUPIL OPTIMIZED DESIGN Technology: JJVC contact lenses, design features, and associated benefits.
10. JJV Data on File 2022. ACUVUE® Brand Contact Lenses for ASTIGMATISM - Overall Fitting Success, Orientation Position, Rotational Stability, and Vision Performance.
11. JJV Data on File 2022. ACUVUE® Brand Contact Lenses for ASTIGMATISM - Overall Fitting Success, Orientation Position, Rotational Stability, and Vision Performance.
12. JJV Data on File 2022. TearStable™ Technology Definition.
13. JJV Data on File 2022. Material Properties: 1-DAY ACUVUE® MOST, 1-DAY ACUVUE® TruEye®, ACUVUE® OASYS 1-Day with HydraLuxe® Technology and ACUVUE® OASYS MAX 1-Day with
TearStable™ Technology Brand Contact Lenses and other daily disposable contact lens brands.
14. Contact Lens Care Systems & Solutions. The Centers for Disease Contact lens Spectrum. https://www.clspectrum.com/issues/2013/june-2013/understanding-contemporary-con14. Contact Lens Care Systems & Solutions. The Centers for Disease Contact Lens Spectrum. https

Important safety information: ACUVUE<sup>®</sup> Contact Lenses are indicated for vision correction. As with any contact lens, eye problems, including corneal ulcers, can develop. Some wearers may experie mild irritation, itching or discomfort, excessive tearing, vision changes, redness or other eye problems. Consult the package insert for complete information. Complete information is also available from Johnson & Johnson Vision Care, Inc. by calling 1-800-843-2020, or by visiting <u>www.jnjvisionpro.com</u>.