

What chemicals can clean our game balls without altering performance?

Our primary recommendation is to follow CDC, state and local guidelines for health and safety. The following widely accepted definitions are relevant to composite leather, PU leather, and leather game ball care (<u>CDC reference</u>):

| | Reduces | Eliminates | Eliminates | | |
|---------------|-----------|-------------|--------------|---------------------------------------|--|
| Definitions | # viruses | 99% viruses | 100% viruses | Notes | |
| Antibacterial | X | | | bacteria ≠ virus | |
| Antiviral | ~ | not always | | | |
| Antimicrobial | ~ | | | virus is a microbe | |
| Clean | ~ | | | removes visible dirt/prepares surface | |
| Disinfect | ~ | ✓ | | | |
| Sanitize | ~ | not always | | | |
| Sterilize | ~ | √ | ✓ | appropriate for hospital settings | |

There are several different methods for sanitizing and disinfecting composite leather, PU leather, and leather game product. Each customer should utilize the method that fits their health and safety protocols and the playing environment and timing needs.

Simple Game Ball Cleaning Method

To clean the ball, players may wish to use dish soap and water. While this practice may be likened to hand washing, note that all soap residue must be rinsed away and that drying time on each ball product may vary. An example cleaning regimen with soap and water includes:

- 1. Add 1 tablespoon of mild dish soap into a 1-gallon container.
- 2. Fill bucket with warm water, until a soapy mixture is formed.
- 3. Wet a first towel with the solution, wring out excess water, and gently wipe down entire product surface for at least 30 seconds.
- 4. Re-wet towel with plain warm water, wring out excess water, and wipe off excess soap from ball surface.
- 5. Rub a second, dry towel on the surface to wipe and dry off.
- 6. Let product air out overnight.

Quick Turn Leather Game Ball Cleaning Method

To clean the ball with faster turnaround times, we reference the following recommendations. The CDC released a <u>list</u> (referred to as 'List N') of effective disinfectants for disabling SARS-CoV-2 (i.e., the virus that causes Covid-19 disease) on hard, nonporous surfaces.

Since our game balls are neither hard nor nonporous, we *cannot assume that 99% of virus particles will be eradicated*, but we believe the CDC's list is a good starting point for greatly reducing virus particles.

It is critical to follow manufacturer and CDC recommendations for the correct application and contact time for each cleaning product to maximize efficacy against SARS-CoV-2. Please note that some products require a wetting time up to 10 minutes to be effective.



Further, we do not recommend using high concentrations of bleach or alcohol to disinfect our products because it can degrade the performance of the product. We also do not recommend using hand sanitizer, which can degrade product performance and is not on the CDC's list N.

Another consideration in cleaning our game ball products is maintaining performance (e.g., grip, pebble, color) over multiple applications. We tested several List N cleaners (up to 5 applications in a 24-hour period) and found they had minimal or no effect on performance:

| Cover | Game Balls | CDC List N Disinfectants | EPA |
|------------|-----------------------------|--|----------------|
| Material | | | registration # |
| Composite | Evo NXT Basketball | Lysol Clean & Fresh Multipurpose cleaner | 777-89 |
| Leather | Solution Basketball | Lonza Disinfectant Wipes Plus | 6836-336 |
| | Evolution Basketball | BTC 2125 M 10% Solution | 1839-86 |
| | FIBA 3x3 Basketball | Clorox Disinfecting Wipes | 5813-79 |
| | OPTX Volleyball | | |
| | K1 Silver Volleyball | | |
| Leather | NFL Duke Football | BTC 2125 M 10% Solution | 1839-86 |
| | K1 Gold Volleyball | | |
| PU Leather | Forte II Soccer ball | Clorox Disinfecting Wipes | 5813-79 |
| | Vanquish Soccer ball | BTC 2125 M 10% Solution | 1839-86 |

While most of the products above can be easily found online for purchase by end consumers, we have identified two possible sources for BTC 2125 M 10% solution (EPA # 1839-86):

- For Individual Orders:
 - Key Supply Company Warsaw Xtra, <u>link for online purchase</u>, promo code Wilson for discount
- For Larger orders:
 - UNX Industries Ally cleaning solution, contact <u>terry.hammond@unxinc.com</u>

Please note that the solvent based cleaners above may leave a residue on the ball or logos depending on method of application and amount used. The cleaning regimen with soap and water specified above may be used intermittently to prevent or reduce buildup of cleaner residue over time.

Special Note on Leather Game Balls

For leather game balls, recommendations are limited. Many CDC list N disinfectants we trialed dried out the leather and decreased performance. We are working on alternative solutions for leather goods, but a potential interim solution may be to disinfect the ball and then apply leather conditioner as a secondary step.

Next Steps

As coronavirus is an ever-changing situation, we are working to deepen our understanding of various disinfectants and procedures for disinfecting our products without affecting performance. We will share relevant updates with our customers as they become available.



Sport Ball cleaning recommendations follow CDC, state, and local guidelines for health and safety. The following link provides common definitions for Sterilization, Disinfection, and Cleaning in Healthcare Facilities, but may be useful for one attempting to clean a ball (including; basketball, softball, football, soccer ball, volleyball, and baseball) with cover material made of leather, composite, or PU leather:

https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html

To ensure applicable health and safety protocols, the user is responsible for determining the best method based on ball covering material, playing environment, and cleaning intervals.

Soap and Water Method

- Dirt and debris can be removed by using a damp cloth with soap and water, using moderate pressure.
- Be careful not to oversaturate the ball.
- Allow to air dry.

| Disinfecting |
|--------------|
| Wipe Method |
| |

- Limited disinfecting may be achieved by using a disinfecting wipe and moderate pressure to wipe the entire surface of the ball.
- Be careful not to oversaturate the ball.
- Allow to air dry.

We do not recommend using bleach and alcohol-based cleaning products, or excessively frequent cleanings, as those may degrade ball covering material and ball markings, and impact overall ball performance.

We will continue to review all available information and will update our recommendations as new developments occur.