Clinical Environments
Cleaning, Care, and Maintenance

With regular care and maintenance, your Herman Miller clinical products will provide many years of superior performance and satisfaction in high traffic, lab, public occupancy, and healthcare environments where disinfection and heavy cleaning is necessary. To maintain the quality of your Herman Miller products, please follow the cleaning procedures outlined here.

Cleaning and Disinfecting Overview

Cleaning and disinfecting clinical products is needed for public or high traffic occupancy.

It is expected that textiles will be contaminated with some microorganisms as well as soiled and stained.

Products typically require low-level disinfection to kill vegetative bacteria, fungi, and lipid viruses.

Consistent and attentive housekeeping practices are required to maintain a clean product and appearance.

A list of suggested cleaners and disinfectants is provided on pages 6-7.

continued
Cleaning and Disinfecting Overview continued

**Routine Cleaning**

Clean furniture at least once every week.

The housekeeper should follow a protocol to remove any debris and wipe down environmental surfaces with a detergent/disinfectant registered with the EPA.

The process includes wiping down the worksufaces, painted metal components, and plastic components paying particular attention to the areas where higher level of touching or contact happens.

**Periodic Cleaning**

Periodic cleaning is defined as regularly scheduled cleaning.

Once per month the furniture should be inspected for: wear, tears, abrasions, or punctures; stains or spots from ink etc.; oil spots (particularly around areas for head and hands); and heavily soiled areas.

This cleaning process is basically lightly brushing and vacuuming to remove dry soil and follow through with the detergent/disinfectant process as described in the above Routine Cleaning section- wiping down the furniture, paying particular attention to the areas where it may receive a higher level of touching.

**Maintenance Cleaning**

Maintenance cleaning is a thorough cleaning two times per year.

The furniture is cleaned where a complete inspection and cleaning process can occur.

If the textile requires wet extraction methods of cleaning, this is the appropriate cleaning protocol.

**Incidental Cleaning**

Incidental cleaning (or spot cleaning) includes the cleaning of spills, spots and stains, which should be remediated upon detection.

Spills may include liquids and solids and food/drink sources.

For general spills and spots, the process involves the use of a spot remover product and a protocol for spot removal. For spills involving bodily fluids (such as blood) additional disinfection is required along with safety protocols and protective gear to protect the housekeeping staff.

**Routine Cleaning**

Make a visual inspection for the integrity of the furniture/fabrics.

Focus cleaning/disinfecting on horizontal surfaces where it may receive a higher touch level from individuals and staff.

**Textiles**

Vacuum fabric.

Do not brush fabric or use a vacuum attachment with a rotary brush.

Brushing may permanently damage or change the character of the fabric.

Regular vacuuming will reduce the need for more aggressive cleaning in the future and will help maintain the original color of the fabric.

**Plastic, Laminates, Painted Metal Components**

Use a soft clean white absorbent cloth to wash painted metal components, plastic, and laminates with a solution of mild detergent and warm water.

Wipe down surfaces with a damp cloth and dry with a clean soft cloth.

Remove debris before applying disinfectant solution or disinfectant wipe.

Wet entire surface to be cleaned and expose to disinfectant for 10 minutes.

Reapply solution to maintain wet application when necessary.

Wipe away solution with a clean cloth.

Change solution frequently.

Always replace cleaning cloth whenever the solution changes.

Dispose of used germicidal solution in toilets or mop sinks.

Dispose of disinfectant wipes in approved waste containers.
Periodic Cleaning Procedure
Inspect for wear, tears, abrasions, or punctures.
Inspect for stains or spots (ex. Ink), blood, and oil spots (particularly around areas for head and hands) and heavily soiled areas.
Remove any visible debris

Textiles
Lightly brush textiles to loosen dry soil.
Vacuum to remove dry soil.
Do not brush fabric or use a vacuum attachment with a rotary brush. Brushing may permanently damage or change the character of the fabric.

Regular vacuuming will reduce the need for more aggressive cleaning in the future and will help maintain the original color clarity of the fabric.

Plastic, Laminates, Painted Metal Components
Use a soft clean white absorbent cloth with a solution of mild detergent and warm water.
Rinse thoroughly and dry with a clean soft cloth.
Remove debris before applying disinfectant solution or disinfectant wipe.
Wet entire surface to be cleaned and expose to disinfectant for 10 minutes.
Reapply solution to maintain wet application when necessary.
Wipe away solution with a clean cloth.
Change solution frequently.
Always replace cleaning cloth whenever the solution changes.
Dispose of used germicidal solution in toilets or mop sinks.
Dispose of disinfectant wipes in approved waste containers.

Maintenance Cleaning Procedure
Remove all components, accessories, telephones, paper, and equipment from the workstation.
Perform a thorough inspection for wear, tears, abrasions, and punctures; stains from ink, blood, etc.; and oil spots (particularly around the areas of the hands and head).
Remove any visible debris.

Textiles
Lightly brush textiles to loosen dry soil.
Vacuum to remove dry soil.
Do not brush fabric or use a vacuum attachment with a rotary brush. Brushing may permanently damage or change the character of the fabric.

Regular vacuuming will reduce the need for more aggressive cleaning in the future and will help maintain the original color clarity of the fabric.

Plastic, Laminates, Painted Metal Components
Use a soft clean white absorbent cloth with a solution of mild detergent and warm water.
Rinse thoroughly and dry with a clean soft cloth.
Remove debris before applying disinfectant solution or disinfectant wipe.
Wet entire surface to be cleaned and expose to disinfectant for 10 minutes.
Reapply solution to maintain wet application when necessary.
Wipe away solution with a clean cloth.
Change solution frequently.
Always replace cleaning cloth whenever the solution changes.
Dispose of used germicidal solution in toilets or mop sinks.
Dispose of disinfectant wipes in approved waste containers.
**Incidental Spills (Spot) Cleaning Procedures**

There are two types of spills: liquid and solid.

Liquid spills include coffee, tea, soft drinks, fruit juices, and milk, as well as bodily fluids and hazardous liquid.

Solid spills include lipstick, grease, ink, crayons, shoe polish, or salad dressing and typical lab and healthcare material that furniture could be in contact with.

### Liquid Spills

Clean promptly with an absorbent cloth before liquids dry.

Clean visible matter with absorbent material.

Use an EPA registered quaternary ammonium germicide for disinfection if appropriate.

If the liquid is a bodily fluid, swab the area with a cloth moderately soaked with the disinfectant and allow the surface to dry.

### Solid Spills

Clean soil promptly, by scraping off residue with dull knife or spoon, and/or blotting up spills with absorbent cloth before liquids dry.

Blot or wipe with an absorbent cloth if there is residue remaining.

Use an EPA registered quaternary ammonium germicide for disinfection if appropriate.

Swab the area with a cloth moderately soaked with the disinfectant and allow the surface to dry.

### Stains

**Coated Metal**

Remove excess liquid or solid spills preceding cleaning procedure.

Remove scuff marks from low-gloss coatings with pre-softened paste wax, following the manufacturer’s instructions.

Remove scuff marks and scratches from high-gloss coatings using automotive polishing compounds, either liquid or paste.

After polishing, apply a pre-softened automotive paste wax to restore original sheen.

**Plastic**

Remove excess liquid or solid spills preceding cleaning procedure.

Wash plastic surfaces with a soft cloth soaked in mild detergent and warm water.

Rinse thoroughly and dry with a soft cloth.

*Do not use solvents or abrasive kitchen cleaners.*

**Laminates**

Remove excess liquid or solid spills preceding cleaning procedure.

For minor repair of burns or other stubborn marks, apply a nonabrasive liquid kitchen cleanser with a soft cloth soaked in warm water.

Rub in the direction of the grain; use caution to avoid damaging the surface texture or gloss.

If no grain direction is visible, rub with a light, circular motion.

*Do not use powder abrasives or other harsh cleansers such as bleach, nitric or hydrochloric acids, or lye; these may deface the surface and change the color of the laminate.*

**Textiles**

There are two types of stains: water-based and oil-based.

Water-based stains are non-greasy stains such as coffee, soft drinks, fruit juices, and milk.

Oil-based include lipstick, grease, ink, crayons, shoe polish, and salad dressing.

**Water-based Stains**

Soak up excess material immediately with a soft absorbent cloth.

Do not dry the stain completely or it may set. The longer a stain is allowed to remain on a fabric, the more difficult it will be to remove.

Tide powder detergent diluted in water (1 tablespoon per 1 cup warm water) in the following manner can be used to remove the stain. A water-based cleaner (specifically for cleaning upholstery fabric) could be used an alternative.

If a plastic spray bottle is used with the Tide detergent mixture, spray on the cloth and not directly on the fabric.

*continued*
Materials

Using a clean, soft cloth, work cleaner in a lather or foam. Brush the stain with light, quick strokes. Start at the outside of the stain and work toward the center. Soak up all remaining cleaning solution and then use another clean cloth dipped in cool water (not overly wet, just damp) to remove any residue that will attract further soiling. This should be repeated several times on a clean section of a cloth to make sure all the cleaning solution is out of the fabric.

Be careful not to overly saturate the stain with the cleaning solution.
Do not rub too vigorously to avoid damage to the nap of the fabric or yarns.
Several light applications are better than one heavy application.
For larger areas, spray cleaning solution directly on fabric.
Do not over saturate.
A water extraction unit can be used to rinse and extract cleaning solution from the fabric.
Do not use any attachment with a rotary brush. Do not use steam.
Allow fabric to dry thoroughly and then vacuum well before using.
Do not brush fabric or use a vacuum attachment with a rotary brush.
Brushing may permanently damage the nap or change the character of the fabric.

Oil-based Stains
Soak up excess material immediately with a soft absorbent cloth.
Do not dry the stain completely or it may set.
The longer a stain is allowed to remain on a fabric, the more difficult it will be to remove.
A dry cleaning solution used in the following manner should remove the stain.
Apply cleaning solution to a damp lint free, soft absorbent cloth.
Apply to the stain with light, quick strokes.
Start at the outside of the stain and work towards the center.
Be careful not to overly saturate the stain with the cleaning solution.
Do not rub too vigorously or you may damage the nap of the fabric or break fibers.
Several light applications are better than one heavy application.
Soak up all remaining cleaning solution.
Allow fabric to dry thoroughly and then vacuum well before using.
Do not brush fabric or use a vacuum attachment with a rotary brush.
Brushing may permanently damage the nap or change the character of the fabric.

Ink, Shoe Polish, Crayon, Lipstick Stains
The longer a stain is allowed to remain on a fabric, the more difficult it will be to remove.
Apply Isopropyl alcohol to a damp lint free, soft absorbent cloth.
With light, quick strokes, start at the outside of the stain and work towards the center.
Be careful not to overly saturate the stain with the Isopropyl alcohol.
Do not rub too vigorously or you may damage the nap of the fabric or break fibers.
Several light applications are better than one heavy application.
Soak up all remaining Isopropyl alcohol.
Allow fabric to dry thoroughly and then vacuum well before using.
Do not brush fabric or use a vacuum attachment with a rotary brush.
Brushing may permanently damage the nap or change the character of the fabric.
If stain persists, use acetone or K2R in place of procedure above.
K2R should be worked into the stain lightly with a cloth when wet.
Follow the manufacturer’s recommended cleaning procedure on the label.
Materials

Cleaners and Disinfectants

The following list of cleaning and disinfectant products is provided to you as a service.

Refer to manufacturer’s label for application, specific product detail, and use.

No warranty is implied since results may vary.

Textiles

Suggested Disinfectants
Quest Chemical Corporation 354 QD-64 Disinfectant 64:1
3M Quat Disinfectant Cleaner No.5
Spartan Chemical Company Green Solutions Neutral Disinfectant Cleaner
Spartan Chemical Company Clean by Peroxy

Alternative Disinfectants
Ecolab Micro Quat Quaternary Detergent Disinfectant
Virex II 128 One-step Quaternary Disinfectant Cleaner and Deodorant
JohnsonDiversey Oxivir tb
Virox AHP 5 General Virucidal Cleaner Disinfectant
Virox Accel TB
Disinfecting Wipes including Clorox, Green Works, Sani-Cloth, Lysol, Oxivir, and CaviWipes.

Note: Do not use disinfecting wipes containing bleach on textiles.

To be Avoided

Bleach

The use of bleach may occur for infrequent disinfecting, but it is recommend to avoid its use because it corrodes metal, damages environmental surfaces, is inactivated by organic matter and is toxic.

Products with a pH factor between 7 and 9 are suitable; a product with a pH of 10.5 or higher may damage the surface integrity.

Petroleum Distillate Solutions

Solutions that contain petroleum distillates should not be used.

Suggested Cleaners for water-based spills, spots, and stains
Tide Powder Detergent Original unscented; diluted in water (1 tablespoon per 1 cup warm water).
Resolve Spot & Stain Carpet Cleaner
Carbona 2 in 1 Oxy Powered Carpet

Suggested Cleaners for oil-based spills, spots, and stains
Afta
Isopropyl Alcohol (rubbing alcohol)
Acetone (nail polish remover)
K2R

Vinyl

Suggested Cleaners
Fade-A-Dyne® Stain Remover
Fantastic Spray Cleaner
Formula 409 All-Purpose Spray
Ultra Ivory Dish Liquid (Classic)

Suggested Disinfectants
Birex® SE Disinfectant
Bleach-Rite® Disinfecting Spray
Citrace® Germicide
Dispatch® Spray Hospital Cleaner Disinfectant with Bleach

Diluted Bleach Solution (10% dilution or less)

Note: Bleach with pH factor between 7 and 9 is suitable; a product with a pH of 10.5 or higher may damage the vinyl surface integrity over an extended period of time.

Disinfecting Wipes including Clorox, Green Works, PDI Sani-Cloth HB Wipes, Lysol, Oxivir, Virox, and CaviWipes.

Note: Disinfecting wipes that contain bleach are acceptable on vinyl. 7.5 to 9 is the recommended pH for bleach.

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Materials

Isopropyl Alcohol
Lysol® Spray Disinfectant
Optim™ 33TB Disinfectant
OXIVIR® TB
SaniZide Plus® Germicidal Solution
Virex® II 256 Cleaner

Alternative Disinfectants

Note: The following disinfectants contain high concentrations of chemicals that are known to discolor vinyl.

Removal of disinfectant residue, per labeled procedures (ex. rinsing), must be performed.

Failure to properly clean chemical residue will cause discoloration over time.

Asepticare TB-II
Cavicide® Surface Disinfectant
CitriGuard® II Hard Surface Disinfectant
Clorox Broad Spectrum
Disinfecting Wipes including PDI® Sani-Cloth Plus Germicidal Wipes and PDI Super Sani-Cloth Germicidal Wipes
Fresh Breeze TB Disinfectant
Precise™ Hospital Cleaner
Wex-Cide™ 128 Cleaner

Coated Metal, Coated Plastic

Suggested Cleaners for Water-based Spills, Spots, and Stains

Ultra Ivory Dish Liquid (Classic)
Tide Powder Detergent Original unscented; diluted in water (1 tablespoon per 1 cup warm water).
Simple Green All Purpose Cleaner

Suggested Paste Wax
Maguire’s Cleaner Wax (paste or liquid)

Suggested Polishing Compound
Maguire’s Clear Coat Safe Polishing Compound

Plastics

Suggested Cleaners for Water-based Spills, Spots, and Stains

Ultra Ivory Dish Liquid (Classic)
Tide Powder Detergent Original unscented; diluted in water (1 tablespoon per 1 cup warm water).
Simple Green All Purpose Cleaner

Laminates

Suggested Cleaners for Water-based Spills, Spots, and Stains

Ultra Ivory Dish Liquid (Classic)
Tide Powder Detergent Original unscented; diluted in water (1 tablespoon per 1 cup warm water).
Simple Green All Purpose Cleaner

Suggested Non-abrasive Cleaners
Soft Scrub Total All Purpose Cleaner

Glass

Suggested Cleaner
Sparkle Glass Cleaner