

Healthcare Care and Maintenance Guide

Healthcare Care and Maintenance - Overview

Healthcare Environments Cleaning Overview	<p>With regular care and maintenance, your Herman Miller healthcare 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.</p> <p>To maintain the quality of your Herman Miller products, please follow the cleaning procedures outlined here.</p>
Cleaning and Disinfecting Overview	<p>Cleaning and disinfecting healthcare products is needed for public or high traffic occupancy.</p> <p>It is expected that textiles will be contaminated with some microorganisms as well as soiled and stained.</p> <p>Products typically require low-level disinfection to kill vegetative bacteria, fungi, and lipid viruses.</p> <p>Consistent and attentive maintenance personnel practices are required to maintain a clean product and appearance.</p> <p>A list of suggested cleaners and disinfectants is provided.</p>
For More Information Website	<p>Visit www.hermanmiller.com/materials for current detailed application information and material specification.</p>



Healthcare Care and Maintenance - Routine Cleaning

Routine Cleaning Every Week <i>Overview</i>	<p>Clean furniture at least once every week.</p> <p>The Maintenance Personnel should follow a protocol to remove any debris and wipe down environmental surfaces with a detergent/disinfectant registered with the EPA.</p> <p>The process includes wiping down the worksurfaces, painted metal components, and plastic components paying particular attention to the areas where higher level of touching or contact happens.</p> <p>Make a visual inspection for the integrity of the furniture/fabrics.</p> <p>Focus cleaning/disinfecting on horizontal surfaces where it may receive a higher touch level from individuals and staff.</p>
Routine Cleaning Every Week <i>Textiles, Seating, Suspension Materials</i>	<p>Vacuum fabric.</p> <p>Do not brush fabric or use a vacuum attachment with a rotary brush.</p> <p>Brushing may permanently damage or change the character of the fabric.</p> <p><i>Regular vacuuming will reduce the need for more aggressive cleaning in the future and will help maintain the original color of the fabric.</i></p>
Routine Cleaning Every Week <i>Plastic, Laminates, Painted Metal Components</i>	<p>Use a soft, clean white absorbent cloth to wash painted metal components, plastic, and laminates with a solution of mild detergent and warm water.</p> <p>Wipe down surfaces with a damp cloth and dry with a clean soft cloth.</p> <p>Remove debris before applying disinfectant solution or disinfectant wipe.</p> <p>Wet entire surface to be cleaned and expose to disinfectant for 10 minutes.</p> <p>Reapply solution to maintain wet application when necessary.</p> <p>Wipe away solution with a clean cloth.</p> <p><i>Change solution frequently.</i></p> <p><i>Always replace cleaning cloth whenever the solution changes.</i></p> <p><i>Dispose of used germicidal solution in toilets or mop sinks.</i></p> <p><i>Dispose of disinfectant wipes in approved waste containers.</i></p>



Healthcare Care and Maintenance - Periodic Cleaning

Periodic Cleaning Scheduled Overview	<p>Periodic cleaning is defined as regularly scheduled cleaning.</p> <p>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.</p> <p>This cleaning process involves lightly brushing and vacuuming to remove dry soil and follow through with the detergent/disinfectant process as described in the Routine Cleaning section, wiping down the furniture, paying particular attention to the areas where it may receive a higher level of touching.</p> <p><i>Inspect for wear, tears, abrasions, or punctures.</i> <i>Inspect for stains or spots (ie, ink), blood, and oil spots (particularly around areas for head and hands) and heavily soiled areas. Remove any visible debris.</i></p>
Periodic Cleaning Scheduled Textiles, Seating, Suspension Materials	<p>Lightly brush textiles to loosen dry soil. Vacuum to remove dry soil.</p> <p><i>Do not brush fabric or use a vacuum attachment with a rotary brush.</i> 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.</p>
Periodic Cleaning Scheduled Plastic, Laminates, Painted Metal Components	<p>Use a soft, clean white absorbent cloth, wash painted metal components, plastic, and laminates with a solution of mild detergent and warm water. Rinse thoroughly and dry with a clean, soft cloth.</p> <p>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. <i>Change solution frequently.</i></p> <p><i>Always replace cleaning cloth whenever the solution changes.</i> <i>Dispose of used germicidal solution in toilets or mop sinks.</i> <i>Dispose of disinfectant wipes in approved waste containers.</i></p>



Healthcare Care and Maintenance - Maintenance Cleaning

Maintenance Cleaning Two Times Per Year <i>Overview</i>	<p>Maintenance cleaning is a thorough cleaning two times per year.</p> <p>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.</p> <p>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.</p> <p>For spills involving bodily fluids (such as blood) additional disinfection is required along with safety protocols and protective gear to protect the maintenance personnel staff.</p>
Maintenance Cleaning Two Times Per Year <i>Textiles, Seating, Suspension Materials</i>	<p>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.</p>
Maintenance Cleaning Two Times Per Year <i>Plastic, Laminates, Painted Metal Components</i>	<p>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.</p> <p>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.</p> <p><i>Change solution frequently.</i></p> <p><i>Always replace cleaning cloth whenever the solution changes.</i></p> <p><i>Dispose of used germicidal solution in toilets or mop sinks.</i></p> <p><i>Dispose of disinfectant wipes in approved waste containers.</i></p>



Healthcare Care and Maintenance - Spills

Incidental Spill (Spot) Cleaning Procedures Overview	<p>There are two types of spills: liquid and solid.</p> <p>Liquid spills include coffee, tea, soft drinks, fruit juices, and milk, as well as bodily fluids and hazardous liquid.</p> <p>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.</p>
Liquid Spills (Spot) Cleaning Procedures	<p>Clean promptly with an absorbent cloth before liquids dry. Clean visible matter with absorbent material.</p> <p><i>Use an EPA registered quaternary ammonium germicide for disinfection if appropriate.</i></p> <p>If the liquid is a bodily fluid, swab the area with a cloth moderately soaked with the disinfectant and allow the surface to dry.</p>
Solid Spills (Spot) Cleaning Procedures	<p>Clean soil promptly, by scraping off residue with dull knife or spoon, and/or blotting up spills with absorbent cloth before liquids dry.</p> <p><i>Blot or wipe with an absorbent cloth if there is residue remaining.</i></p> <p><i>Use an EPA registered quaternary ammonium germicide for disinfection if appropriate.</i></p> <p>Swab the area with a cloth moderately soaked with the disinfectant and allow the surface to dry.</p>



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Stains and Spills

Coated Metal <i>Stains and Spills</i>	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 <i>Stains and Spills</i>	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.
	<i>Do not use solvents or abrasive kitchen cleaners.</i>
Laminates <i>Stains and Spills</i>	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.
	<i>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.</i>



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Textiles Stains and Spills Overview	<p>There are two types of stains: water-based and oil-based.</p> <p>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</p>
Textiles Water-based Stains and Spills	<p>Water-based Stains</p> <p>Soak up excess liquid immediately with a soft absorbent cloth.</p> <p>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.</p> <p>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 as an alternative.</p> <p>If a plastic spray bottle is used with the Tide detergent mixture, spray on the cloth and not directly on the fabric.</p> <p>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.</p> <p>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.</p> <p>Be careful not to overly saturate the stain with the cleaning solution.</p> <p>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.</p> <p>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.</p>



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Textiles Oil-based <i>Stains and Spills</i>	Oil-based Stains Remove the excess liquid or solid 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.
Textiles Ink, Shoe Polish, Crayon, Lipstick <i>Stains and Spills</i>	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.

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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, Seating Suspension Materials Cleaners and Disinfectants	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
	<i>Bleach</i>
	<i>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.</i>
	<i>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.</i>
	<i>Petroleum Distillate Solutions</i>
	<i>Solutions that contain petroleum distillates should not be used.</i>
	Suggested Cleaners for water-based spills, spots, and stains Tide Powder Detergent
	Original unscented; diluted in water (1 t ablespoon per 1 cup warm water).
	Resolve Spot & Stain Carpet Cleaner
	Carbona 2 in 1 O xy Powered Carpet
	Suggested Cleaners for oil-based spills, spots, and stains
	Afta
	Isopropyl Alcohol (rubbing alcohol)
	Acetone (nail polish remover)
	K2R

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Vinyl *Cleaners and Disinfectants*

Suggested Cleaners

Fade-A-Dyne® Stain Remover
Fantastik 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.

Vinyl Suggested Disinfectants

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



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Coated Metal, Coated Plastic Cleaners and Disinfectants

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

Suggested Disinfectants

Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

Durawrap Cleaners and Disinfectants

Suggested Cleaner

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 Disinfectants

Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

Glass Cleaners and Disinfectants

Suggested Cleaner

Sparkle Glass Cleaner

Suggested Disinfectants

Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes



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Plastics Cleaners and Disinfectants

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 Disinfectants
Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

To Be Avoided

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.

Durawrap Cleaners and Disinfectants

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
Suggested Disinfectants
Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

To Be Avoided

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.



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Formcoat *Cleaners and Disinfectants*

Suggested Cleaners

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
Formula 409 All-Purpose Spray
Kleerdex Kleer Off General Purpose Cleaner

Suggested Cleaner for Metal marring

ZUD Multi-Purpose Cream Cleanser

Suggested Disinfectants

Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
3M Quat Disinfectant Cleaner No.5
Quest Chemical Corporation 354 QD-64 Disinfectant 64:1
Spartan Chemical Company Green Solutions Neutral

Disinfectant Cleaner
Isopropyl Alcohol
Including Kiercide 70/30
Alternate Disinfectant
Virex II 128 One-step Quaternary Disinfectant Cleaner
and Deodorant

To Be Avoided

The use of bleach may occur for infrequent disinfecting, but it is recommended 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.

Caution: Use proper care to minimize overspray on materials near Formcoat surfaces. Overspray on materials near Formcoat may cause permanent damage to the surface of those materials.



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Corian *Cleaners and Disinfectants*

Suggested Cleaners

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 Cleaner

Soft Scrub Total All Purpose Cleaner
Suggested Disinfectants
Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

To Be Avoided

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.

Do not use window cleaners; they can leave a waxy build-up that dulls the surface.
Note: Undetected or prolonged exposure to chemicals may damage the surface.

Keyless Locks *Cleaners and Disinfectants*

Suggested Cleaning Instructions

Keyless Lock surface, use a damp wipe or apply a non-acid based cleaner to a clean cotton cloth.

To Be Avoided

Do not over soak with solutions on keyless lock with cleaner or spray cleaner. This could effect battery life.

Do not use saturated rag with cleaner and do not spray cleaner directly on the Keyless Lock. Wipe down the keypad and housing surface of excess cleaner.



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Wood and Wood
Veneer
Cleaners and
Disinfectants

Suggested Cleaners
Guardsman Anytime Clean
Polish Pledge Lemon Enhancing Polish
Suggested Disinfectants
Disinfecting Wipes
Including Clorox, Lysol, and PDI Sani-Cloth Wipes
Quaternary Ammonia
Including Diversey Virex II 256, Ecolab Mikro-Quat,
Fantastik All-Purpose Cleaner
Isopropyl Alcohol
Including Kiercide 70/30

To Be Avoided
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