



OVER
50
YEARS
OF
CLEAN



 **Texwipe**[®]
An *TW* Company

Cleaning & Disinfecting Guide

SMALL & LARGE SURFACES

www.texwipe.com



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About Texwipe

Texwipe's commitment to innovation, leadership and quality in cleanroom consumable products spans more than fifty years. We invest in technology to respond to our customers' evolving needs in contamination control.

Texwipe's Core Values are:

- **Innovation** - Texwipe pioneers the latest technologies to provide innovation in contamination control products and processes.
- **Quality** - Texwipe product quality is maintained by the most advanced testing and quality control standards in the industry.
- **Technology Leadership** - Texwipe leads our industry in testing metrology, methods and processes to reduce contamination.

Throughout Texwipe's global operations, we support our customers with products designed to exceed the requirements for cleanroom consumable products. Our highly professional team will help you select and develop products for any critical environment application.

Cleaners and Disinfectants Differentiation



| | Disinfectants | | | Cleaners | | |
|--|---------------|--------------------|----------------------------|----------|--------------------------------|---------|
| | TexQ® | TexTab™ | TexCide™ | TexP™ | IPA | Ethanol |
| Applications | | | | | | |
| EPA-registered | ✓ | ✓ | ✓ | | | |
| One-step cleaner and disinfectant | ✓ | ✓ some dilutions | ✓ | | | |
| Sporicidal (kills spores) | | ✓ | ✓ | | | |
| May be used in pre-cleaning | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| May be used in disinfectant rotation program | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| May be used as residue removal agent | | | | ✓ | ✓ | ✓ |
| Needs rinse | ✓ | ✓ | ✓ | | | |
| Properties | | | | | | |
| 0.2 µm filtered | ✓ | n/a | ✓ | ✓ | ✓ | ✓ |
| Biodegradable | | | ✓ | ✓ | | |
| No added dyes and fragrances | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| No Volatile Organic Compounds (VOC) | ✓* | | <0.5% at use concentration | ✓ | | |
| Non-flammable | ✓ | ✓ | ✓ | ✓ | | |
| Shelf life, years | 2 | 3 | 1 | 3 | sterile - 2 non-sterile - 3 | 2 |
| USP-compliant components (made with) | n/a | n/a | n/a | ✓ | ✓ | ✓ |
| Gamma-irradiated available | ✓ | | | | ✓ | ✓ |
| Testing | | | | | | |
| Endotoxin tested | ✓ | | | | ✓ | ✓ |
| Sterile validated | ✓ | | | | ✓ | ✓ |
| Lot traceable | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Forms and Packaging | | | | | | |
| Ready-to-use solution | ✓ | tablet | | ✓ | ✓ | ✓ |
| Concentrate available | ✓ | tablet | ✓ | | | |
| Dilution rate for the concentrate solution | 2 oz / gallon | see dilution chart | 4 oz / gallon | | | |
| Double-bagged bottle/container | ✓ | | | ✓ | ✓ | ✓ |

*Low levels of VOC materials are in the product: the quat mixture (860 ppm), EDTA (300 ppm) and nonionic surfactant (400 ppm).

For more information about disinfectants and cleaners see [Texwipe's Solutions Guide](#). (click here)

Cleaning and Disinfecting: Small Surfaces

| | |
|-------------------|--|
| Step 1 | Select a wipe, a disinfectant and a cleaning agent. |
| Step 2 | Pre-Clean the surface with cleaning agent and a wipe. If using TexQ® one-step cleaner/disinfectant, you may skip this step. |
| Step 3 | Spray the disinfectant on the wipe. |
| Step 4 | Wipe the surface. |
| Step 5 | Wait for the disinfectant's contact time. Allow the surface to remain wet for the required contact time, 10 minutes for most disinfectants including TexQ®. |
| Step 6 | Remove the residue. Repeat steps 3 and 4 with a residue removal agent. |

Tips

Tips

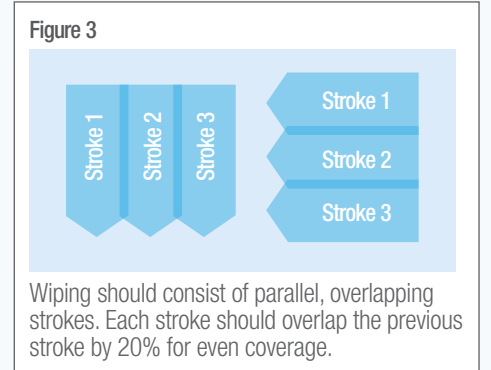
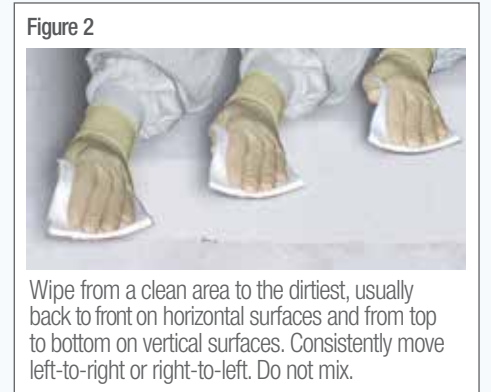
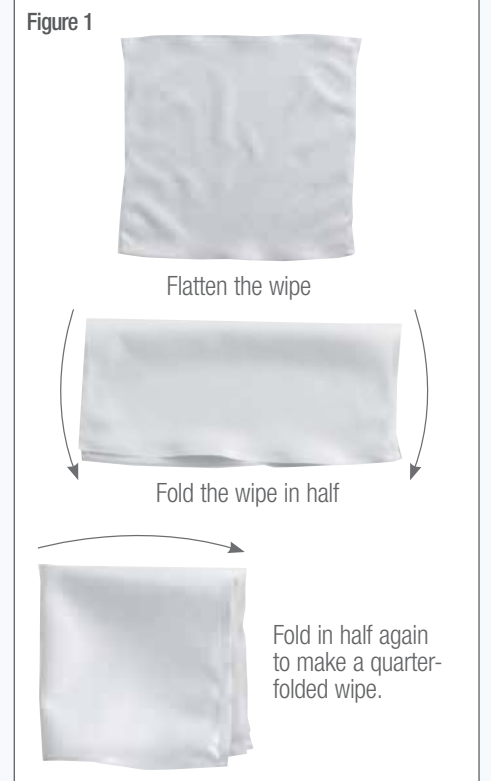
Tips

Tips

Tips

Tips

| | | |
|---|---|---|
| Wiper and Disinfectant Selection | <ul style="list-style-type: none"> • Make sure your wipe is compatible with the disinfecting solution. See Wipe/Disinfectant Compatibility, page 9 for more info. <ul style="list-style-type: none"> » Cotton wipes are not compatible with quats » Nylon wipes are not compatible with peroxides and quats » Microdenier and polyester wipes work well with quats, peroxides, bleach and IPA | <ul style="list-style-type: none"> • For sterile or aseptic areas, use sterile wipes and disinfectants. See the Disinfectant Classification, page 8. • See the cleaning agents and disinfectants differentiation on page 1. |
| Pre-Cleaning | <ul style="list-style-type: none"> • A pre-cleaning step is required when: <ul style="list-style-type: none"> » One-step disinfectants are not used (always before bleach, hydrogen peroxide, some phenols and quats. Check the label.) » The surface has visible soil, the soil must be removed before any disinfectant use. | <ul style="list-style-type: none"> • When using a one-step disinfectant, no pre-cleaning of the surface is required before disinfectant application, if no visible soils are present. • Use different wipes for cleaning and disinfecting solutions. <ul style="list-style-type: none"> » You may use already pre-wetted wipes for pre-cleaning (for example with 70% IPA), see page 10. |
| Spraying the Wipe | <ul style="list-style-type: none"> • Spraying the wipe, not the surface, is recommended. If the disinfectant solution is sprayed directly onto the surface, the surface contaminants and solution droplets may be spread to adjacent areas. | <ul style="list-style-type: none"> • Hold the nozzle close to the wipe for even coverage, but not too far so as to spray the solution particles into the air. • Spray the wipe to the wetness level sufficient to deposit a visible layer of the solution on the surface. |
| Wiping Technique | <ul style="list-style-type: none"> • For the most efficient wiper use, quarter-fold the wiper by first folding the wipe in half, and then in half again. (See Figure 1, right) | <ul style="list-style-type: none"> • Wipe from a clean area to the dirtiest, usually back to front (toward you) on horizontal surfaces and from top to bottom on vertical surfaces. Consistently move left-to-right or right-to-left. Do not mix (See Figure 2, right). • Wiping should consist of parallel, overlapping strokes. Each stroke should overlap the previous stroke by 20% for even coverage (See Figure 3, right). • DO NOT USE circular strokes or S-strokes as these only spread contamination. |
| Disinfectant Use | <ul style="list-style-type: none"> • Follow disinfectant's instructions found on its label including the contact time required to kill specific or described microbes. If diluting a concentrate, be sure to follow the label use instructions and your site cleaning and disinfecting protocol. | <ul style="list-style-type: none"> • The indicated exposure time is needed to destroy the listed bacteria, viruses and fungi. • All disinfectants (phenol-, quat-, hydrogen peroxide plus peracetic acid-, and bleach-based products) leave residue, which should be removed. |
| Removing Residue | <ul style="list-style-type: none"> • Use another wipe and residue removal agent. • The residue removal agent could be 70% Isopropyl Alcohol (IPA) or TexP™ (4% or 7.5% hydrogen peroxide solution). • In aseptic compounding areas, sterile 70% IPA solution and wiper use is required by USP<797>. | <ul style="list-style-type: none"> • You may use 70% IPA pre-wet wipes (see page 10). With the higher IPA content, drying is rapid. The level of wetness is optimized for efficient removal of residues. • For product contact surfaces – residue removal is necessary after each application of a disinfectant or sporicide. • For non-product contact surfaces, the residue may be removed as outlined in cleaning SOP. • For other room surfaces such as wall, floors and ceilings, perform the residue removal step as defined in the site cleaning protocol. • The wiping technique is the same as mentioned above. |



CLEANED Now your surface is clean, disinfected, and ready for use.

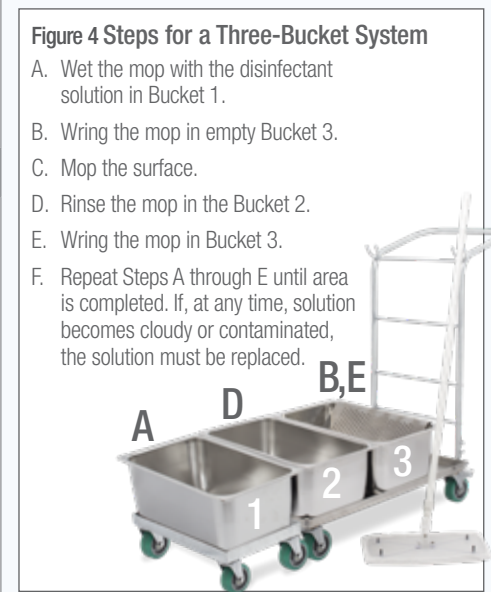
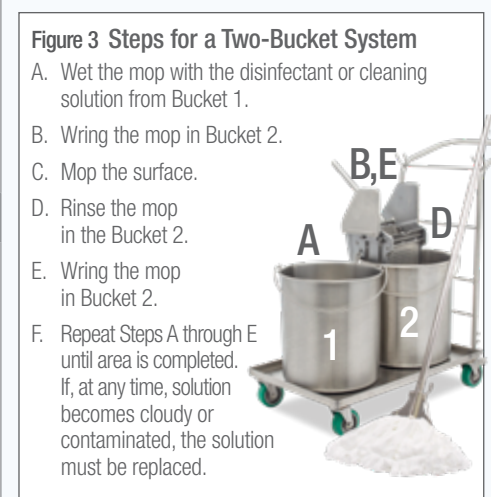
Need to make sure your surface is clean? Conduct a cleaning validation study in accordance with IEST-RP-CC018.4. (See the recommended products on page 12)

Source: The Institute of Environmental Sciences and Technology (IEST) Recommended Practice CC08, "Cleanroom Housekeeping: Operating and Monitoring Procedures". Arlington Heights, Illinois.

Cleaning and Disinfecting: Large Surfaces (Walls & Floors)

| | | | |
|-------------------|--|--|-------------|
| Step 1 | | <p>Select a bucket system, mop, and disinfectant.</p> | Tips |
| Step 2 | | <p>Pre-Clean the surface with a cleaning agent and a mop.</p> <p>If using TexQ® one-step cleaner/disinfectant, you may skip this step.</p> | Tips |
| Step 3 | | <p>Prepare a disinfecting solution in the buckets.</p> | Tips |
| Step 4 | | <p>Mop the Walls/Ceiling</p> <p>Continue to next pages</p> | Tips |

| | | |
|--|--|---|
| Bucket, Mop and Disinfectant selection | | |
| <ul style="list-style-type: none"> Choose a bucket system from page 11. Use flat mops for walls and ceilings; string or strip mops for floors. Choose the mop covers/refills (See Texwipe's Cleanroom Mops brochure). Review the disinfectant classification chart on page 8. Select a Standard Operating Procedure (SOP)-approved disinfectant from the chart. | <ul style="list-style-type: none"> Confirm your mop material is compatible with the disinfectant class. See the Wipe/Mop/Disinfectant compatibility chart on page 9. For sterile or aseptic areas, use sterile products (wipers, disinfectants, and equipment such as mops and buckets) for cleaning and disinfection. See the cleaning agents and disinfectants differentiation on page 1. | <ul style="list-style-type: none"> Use sterile polyethylene liners (STX7099) to protect your buckets from disinfectant exposure. Bucket liners extend the life of buckets and aid in easier clean up. The three-bucket system is considered more effective than the one- or two-bucket systems since the disinfectant solution in Bucket 1 is less likely to be contaminated by the soils removed from the surface, or diluted during use. |
| Pre-Cleaning | | |
| <ul style="list-style-type: none"> Ceilings and walls typically do not need a pre-cleaning step. Floors are typically classified as "high traffic" and are likely to be considered soiled, requiring a pre-cleaning step before disinfection. The pre-cleaning step is not required when a one-step disinfectant is used (for example, TexQ® disinfectant: TX650, TX651), unless visible soil is present. | <ul style="list-style-type: none"> Bleach, hydrogen peroxide, some phenols and other quats usually require the pre-cleaning step. Check the use label. Use a cleaning solution for a pre-clean step. Some disinfectants like Bru-Clean (TX6466) may be used for pre-cleaning, too. | <ul style="list-style-type: none"> Use dedicated mops for cleaning solutions. Use the same applications steps (Figures 3 and 4, right) and techniques (described in Steps 4 and 5) as for disinfection. |
| Mixing a Disinfectant | | |
| <ul style="list-style-type: none"> If the contents of the buckets have already been defined by SOP, follow accordingly. If not, review the following sections. For a two-bucket system: Mix the disinfecting solution in Bucket 1. Fill Bucket 2 with the same solution (to avoid the dilution of the disinfectant in Bucket 1) or water. (See Figure 1, right). For a three-bucket system: Mix the disinfecting solution in Bucket 1. Fill Bucket 2 with the same solution (to avoid the dilution of the disinfectant in Bucket 1) or water. Leave Bucket 3 empty as it is used as the wring bucket to collect the dirty solution. (see Figure 2). | <ul style="list-style-type: none"> Refer to the disinfectant product label for correct dilution rate. Adding extra concentrate leaves more residue that requires removal later. Use the same water as used in the environment or manufacturing process to make up solutions and rinses (i.e., sterile water for sterile areas). | <ul style="list-style-type: none"> If a disinfectant rotation is practiced, a thorough rinsing of all surfaces is required between disinfectant uses. The mopping solution (based on the two- or three-bucket methods) must be changed after 600 square feet (at a minimum) for Class 100 and 1000 (ISO 5/6) and after 1000 square feet (at a minimum) for Class 10 000 and 100 000 (ISO 7/8)*. The mop head should be re-wetted every eight linear feet. |
| Mopping Technique: Walls/Ceiling | | |
| <ul style="list-style-type: none"> Use flat mops only. Use the application steps from Figures 3 and 4 (right). For walls: <ul style="list-style-type: none"> Starting from the cleanest area of the room, usually furthest from the entrance, mop from the cleanest to the dirtiest area of the wall, usually, vertically, from the ceiling to the floor. Walls may be also cleaned using horizontal, parallel strokes, starting at the ceiling (cleanest) and working from top to bottom (dirtiest). Do not mix horizontal or vertical strokes. Be careful not to touch the ceiling or the floor with the mop while cleaning the walls. Work towards the dirtiest area of the cleanroom, the entrance. | <ul style="list-style-type: none"> For ceilings: <ul style="list-style-type: none"> Mopping with a flat mop should consist of parallel, overlapping strokes. Each stroke should overlap the previous stroke by 20% for even coverage. Use four-foot strokes and do not mop over your head. Do not contact or wet the HEPA filters. This will degrade the filter. After each stroke, re-wet the mop. | <ul style="list-style-type: none"> Mop covers should be replaced according to your SOP, when visibly dirty or no longer effectively applying or removing solution. |



Cleaning and Disinfecting: Large Surfaces (Walls & Floors)

| | | |
|-------------|--|--|
| Step 5 ↓ | | Mop the Floor |
| Step 6 ↓ | | Disinfect Equipment Wheels |
| Step 7 ↓ | | Wait for the disinfectant's contact time. Allow the surface to remain wet for the required contact time, 10 minutes for most disinfectants including TexQ®. |
| Step 8 ↓ | | Remove residues. |

Tips

Tips

Tips

Tips

Mopping Technique: Floors

- Use flat or string/strip mops. Use the application steps from Figure 3 and 4, previous pages.
- Floors will require more frequent cleaning and disinfection than walls and ceilings.
- Mop from the cleanest area to the dirtiest, typically, from the area furthest from the entrance to the entrance.
- The first technique is “pull-lift” method. The mop is placed onto the floor, pulled toward the person, lifted, the mop head is turned to the other side (no turning for the flat mop) and replaced onto the area with an overlapping stroke. The mop is placed into the bucket after two strokes of four feet in length (see Figure 5, right).
- The second technique is a series of **S-curves**. The mop is placed onto the surface, pulled from left to right, for a maximum of four feet, reversed with an overlapping stroke, for a maximum of 4 feet. The mop is flipped over and the steps are repeated (no flipping over for the flat mop). The mop is placed into the bucket after two sets of strokes four feet in length (see Figure 6, right).
- Each stroke should overlap the previous stroke by 20% for even coverage, for both techniques.
- Mop covers should be replaced according to your SOP, when visibly dirty or no longer effectively applying or removing solution.

Disinfecting Wheels Technique

- To bring wheeled equipment from the unmopped side (dirty) to the mopped side (disinfected) of the cleanroom
 - » On the unmopped floor, adjacent to the mopped floor area, wipe the contact surface of the front wheels thoroughly.
 - » Place two saturated wipes onto the floor where the unmopped and mopped areas meet ahead of the wheels. Push the wiped front wheels onto the wipes until the wheels have been cleaned in a 360° fashion on the wipes. Push the sanitized wheels onto the mopped floor.
 - » Repeat the same steps for the back wheels. Do not allow for the back wheels to cross onto the disinfected floor until they have been properly disinfected.

Disinfecting Wheels Technique

- Follow the disinfectant's use instructions found on its label, which includes the contact time required to kill specific or described microbes.
- When disinfecting, the mop should be wet enough to leave a solution layer on the surface to remain wet for the prescribed contact time to allow the disinfectant to destroy the listed bacteria, viruses and fungi.
- When pre-cleaning/using just a cleaning solution, the mop should be as dry as possible.

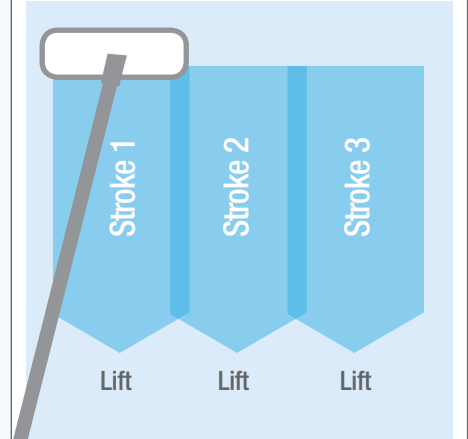
Removing Residue

- All disinfectants (phenol-, quat-, hydrogen peroxide + peroxyacetic acid-, and bleach-based products) leave residues.
- The residues on walls and ceilings need to be removed infrequently, as outlined in cleaning SOP. Residues on floors need to be removed more frequently, as outlined in cleaning SOP, due to safety reasons (slipping hazard), residue visibility or possible product or process contamination.
- To remove residues, use the two- or three-bucket system with water only, IPA solution (TX3290 sterile, TX117 nonsterile) or Hydrogen peroxide solutions (TexP™ TX684G and TX687G).
- Use the same water used in the room, e.g., sterile water for sterile areas.
- Apply the same Application steps (Figures 3 and 4, previous pages) and techniques (described in Steps 4 and 5) as described on previous pages.

Need to make sure your surface is clean? Conduct a cleaning validation study in accordance with IEST-RPCC018.4. (See the recommended products on page 12)

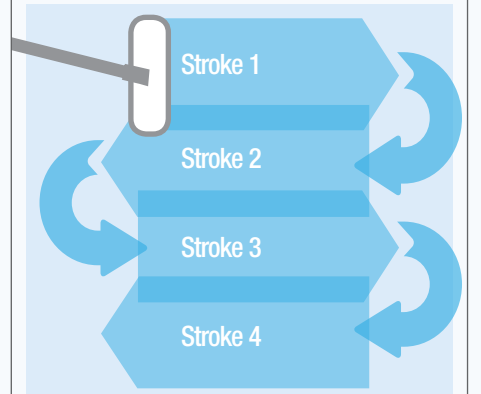
Sources:
 • Anne Marie Dixon, “Cleaning of Non-Product Contact Surfaces” in *Cleaning and Cleaning Validation for the Pharmaceutical and Medical Device Industries, Volume 1: Basics, Expectations and Principles*, Paul L. Pluta, editor, DHI Publishing, River Grove, IL, 2009, pp 221 – 234.
 • The Institute of Environmental Sciences and Technology (IEST) Recommended Practice CC08, “Clean-room Housekeeping: Operating and Monitoring Procedures”. Arlington Heights, Illinois.

Figure 5 Pull-Lift Mopping Technique



Place mop onto the floor and pull toward the person, lift, the mop head is turned to the other side (no turning for the flat mop) and replace onto the area with an overlapping stroke. The mop is placed into the bucket after two strokes of four feet in length. Each stroke should overlap the previous stroke by 20% for even coverage.

Figure 6 S-Curves Mopping Technique



The mop is placed onto the surface, pulled from left to right, for a maximum of four feet, reversed with an overlapping stroke, for a maximum of 4 feet. The mop is flipped over and the steps are repeated (no flipping over for the flat mop). The mop is placed into the bucket after two sets of strokes four feet in length. Each stroke should overlap the previous stroke by 20% for even coverage.

CLEANED Now your surface is clean, disinfected, and ready for use.

Disinfectants Classifications

| | Isopropyl Alcohol | Chlorine Compounds, Bleach Sodium Hypochlorite 5.25% (bleach concentrate) | Phenolics | Quaternary Ammonium Compounds (QACs) | Oxidizing Disinfectants, Hydrogen peroxide |
|--|--|---|--|---|--|
| Description | Variable activity against some bacterial and fungal species. Bactericidal disinfectant. 70% IPA is proved to be the most effective concentration. | Bactericidal (kills bacteria, viruses & fungi) at <5000ppm sodium hypochlorite. Sporicidal (kills spores) at >5000ppm Sodium Hypochlorite. | Bactericidal disinfectant (kills bacteria, viruses, fungi), tuberculocidal. | Bactericidal disinfectant (kills bacteria, viruses and fungi). Some products are tuberculocidal. | This group includes oxygen-releasing compounds (peroxygens) such as peracetic acid and hydrogen peroxide. Bactericidal (kills bacteria, viruses, fungi), tuberculocidal. Sporicidal (kills spores). |
| Pre-cleaning Needed | Surfaces must be pre-cleaned. | Surfaces must be pre-cleaned. | Surfaces must be pre-cleaned. Some products are registered as one-step disinfectant cleaners. | Product specific. Some products registered as one-step disinfectant cleaners. | Product specific. Surfaces must be pre-cleaned, depending on formulation. |
| Advantages | <ul style="list-style-type: none"> Quick evaporation Removes many surface contaminants Removes residual disinfectant Leaves extremely low residue Can be a good general use disinfectant Compatibility combined with other disinfectants (quaternaries, phenolics) No rinse required | <ul style="list-style-type: none"> The same product can be used for routine and special event tasks, by changing the concentration Relatively quick microbial kill May be used on food preparation surfaces requiring a surface rinse depending on bleach concentration Can be tuberculocidal and sporicidal with increased concentration Some products are tuberculocidal | <ul style="list-style-type: none"> Mostly presented in concentrate formulations, need to be mixed to make the ready-to-use solution Some products are tuberculocidal Effective over large pH range Some products are one-step disinfectants cleaners | <ul style="list-style-type: none"> One-step formulations contain a detergent to help loosen soil, no pre-clean step needed Colorless, odorless (but act as deodorizers) Less corrosive May be used on food preparation surfaces (need rinse) Effective at temperatures up to 212°F | <ul style="list-style-type: none"> Hydrogen peroxide is non-corrosive in diluted form but is corrosive in combination with peracetic acid No rinsing required Some products are odorless Clear and colorless, thereby avoiding surface staining Fast, broad spectrum activity, sporicidal Can be safer for personnel (less toxic) depending on concentration |
| Disadvantages | <ul style="list-style-type: none"> Poor cleaner (does not contain detergents) Limited contact time, not sufficient for broad range killing, evaporates quickly VOC emissions Flammable, not to be used near a flame Not active against certain types of viruses Low toxicity but an eye irritant | <ul style="list-style-type: none"> Toxic. May damage floor finishes, carpets, clothing and other fibers when used in higher concentrations Has an unpleasant odor Must be stored separately from ammonia and flammable products Rinsing is required Corrodes metals such as stainless, aluminum Increase in alkalinity decreases bactericidal properties Eye, skin, and respiratory irritant | <ul style="list-style-type: none"> Considered a persistent bio accumulative toxin by EPA Disposal restrictions in some states. Check state and local regulations Not for use on food or food utensils May damage floor finishes and other surfaces Unpleasant odor Effectiveness reduced by alkaline pH or natural soap Prolonged contact deteriorates rubber Can cause skin & eye irritation Corrosive & toxic | <ul style="list-style-type: none"> Ineffective against bacterial spores, TBC, some viruses Effectiveness influenced by hard water RTU formulations are non-irritating to skin but avoid skin or eye contact; toxic Neutralized by anionic soap (common) and effectiveness reduced by organic material Pre-rinse may be required when rotating disinfectants Rinsing is required | <ul style="list-style-type: none"> Rinsing is required where direct skin or oral contact can occur Corrosive to soft metals Pre-cleaning step is required Temperature and light sensitive Pungent odor (vinegar) Pure hydrogen peroxide formulations do not require rinse |
| CDC Disinfection Level | Intermediate | Intermediate level disinfectant | Some are intermediate some are low level noted on label. | Low level disinfectant | Product specific. Low, intermediate or high level disinfectant (depends on concentration and exposure time). |
| EPA Toxicity Category (See chart below) | Category IV | Category I | Category I or II | Category III | Category III or IV, product specific. |
| Storage | Stable in storage. Keep away from oxidizing agents, heat and flames. | If used for disinfecting purposes, bleach should not be stored longer than three months. When mixed with water the solution is only effective as a disinfectant for 24 hours. The available chlorine level (NaOC) must be monitored. | Stable in storage. Flammable if in aerosol form. | Stable in storage. | Stable in storage. Two year shelf life is available depending on concentration and formulation. Keep away from heat and light. |

**EPA Toxicity Categories Require These Warnings:

| Signal Word | Category | Oral Lethal Dose ¹ |
|---------------------------------------|-------------------------|---------------------------------|
| DANGER, POISON (Skull and crossbones) | I Highly toxic | A few drops to a teaspoonful |
| WARNING | II Moderately toxic | Over a teaspoonful to one ounce |
| CAUTION | III Slightly toxic | Over one ounce to one pint |
| CAUTION | IV Relatively non-toxic | Over one pint to one pound |

¹Based on a 150-pound person

Disinfectant + Wiper Product Compatibility

| Material/ Fabric | Texwipe Wiper Products | Texwipe Mop Products | Texwipe Swab Products | Disinfectants | | | Cleaners | | |
|---|--|---|---|-------------------|---------------------|----------------------|-------------------|-----|---------|
| | | | | TexQ [®] | TexTab [™] | TexCide [™] | TexP [™] | IPA | Ethanol |
| Polyester/ Cellulose | TX622, 624, 629, 604, 606, 609, 612, 1109, 1112, 1118, 3210 | | | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Microdenier (100% Polyester) | TX59, 3059 | AlphaMops: TX7118M, STX7118M , TX7114M, STX7114M BetaMops: TX7070, STX7070 | Microdenier Series | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Polyester (100%) | TX1010, 1012, 1029, 1050, 1052, 1060, 1069, 1070, 1080, 8659, 1004, 1009, 1009B, 1013, 1008, 1008B, 2064, 2069, 2424, 2452, 2409, 2412, 2418, 49, 42, 29, 22 TX3042, 3049, 3215, 3225, 3220, 3211, 3212, 3224, STX404, 409 | AlphaMops: TX7118, STX7118 , TX7114, STX7114 BetaMops: TX716R, STX716R , TX7072, STX7072 | Alpha Series, Absorbond Series Polyester Honeycomb Series | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Polyester/ Rayon | | BetaMops: TX7073, STX7073 | | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Nylon | TX4004, 4009, 4012 | | TX730 | ✗ | ✓ | ✗ | ✗ | ✓ | ✓ |
| Cotton | TX309, TX306, TX304, TX318, TX312, TX329 | | Cotton Series | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Foam | TX704 | | CleanFoam Series A, CleanFoam Series B, General Purpose Foam Series | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Polypropylene/ Cellulose | TX699, 2009 | | | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ |

Sterile products are marked in **BOLD**

✗ = not compatible ✓ = compatible

Pre-Wet Wipers

| Solution | Material | Name | Size | TX# | Bag Qty | Case Qty | ISO Class | EU Grade |
|--------------------------|---------------------|--------------|---------------------------|--------|-----------------------|----------|-----------|----------|
| Non-Sterile | | | | | | | | |
| IPA 70% | Polyester | Vertex® HS | 12" x 12" (30 cm x 30 cm) | TX42P | 50 | 4 | 3-7 | A-D |
| | | | 9" x 9" (23 cm x 23 cm) | TX49P | 75 | 4 | 3-7 | A-D |
| | | AlphaSat® | 4" x 4" (10 cm x 10 cm) | TX1034 | 200 | 4 | 4-8 | A-D |
| | | | 6" x 6" (15 cm x 15 cm) | TX1036 | 75 | 12 | 4-8 | A-D |
| | | | 9" x 9" (23 cm x 23 cm) | TX1039 | 50 | 4 | 4-8 | A-D |
| | | QuanSat™ | 9" x 9" (23 cm x 23 cm) | TX1084 | 50 | 12 | 3-7 | A-D |
| | Polyester/Cellulose | TechniCloth® | 6" x 8" (15 cm x 20 cm) | TX1045 | 100 | 12 | 5-8 | B-D |
| | | | 9" x 11" (23 cm x 28 cm) | TX1041 | 70 | 12 | 5-8 | B-D |
| | | | 9" x 11" (23 cm x 28 cm) | TX1065 | 50 | 24 | 5-8 | B-D |
| | | | 7" x 11" (18 cm x 28 cm) | TX1067 | 200 | 4 | 5-8 | B-D |
| | Polypropylene | PolySat® | 7" x 11" (18 cm x 28 cm) | TX1040 | 200 | 4 | 5-8 | B-D |
| | | | 9" x 11" (23 cm x 28 cm) | TX1051 | 50 | 24 | 5-8 | B-D |
| | | | 6" x 11" (15 cm x 28 cm) | TX8723 | 75 | 24 | 5-8 | B-D |
| 6" x 11" (15 cm x 28 cm) | | | TX8727 | 75 | 20 & 1 case container | 5-8 | B-D | |
| Ethanol 70% | Polyester/Cellulose | TechniCloth® | 7" x 11" (18 cm x 28 cm) | TX1068 | 25 | 20 | 5-8 | A-D |

| Solution | Material | Name | Size | TX# | Bag Qty | Case Qty | ISO Class | EU Grade |
|--------------------------|--------------------------|---------------------|---------------------------|---------------------------|---------|----------|-----------|----------|
| Sterile | | | | | | | | |
| IPA 70% | Polyester | Vertex® HS | 12" x 12" (30 cm x 30 cm) | TX3042P | 25 | 5 | 3-7 | A-D |
| | | | 9" x 9" (23 cm x 23 cm) | TX3049P | 25 | 5 | 3-7 | A-D |
| | | AlphaSat® | 12" x 12" (30 cm x 30 cm) | TX3252 | 25 | 5 | 4-8 | A-D |
| | | | AlphaSat® 10 | 12" x 12" (30 cm x 30 cm) | TX3280 | 50 | 5 | 2-7 |
| | 9" x 9" (23 cm x 23 cm) | TX3285 | 20 | 20 | 2-7 | A-D | | |
| | | Polyester/Cellulose | TechniCloth® | 9" x 11" (23 cm x 28 cm) | TX3214 | 50 | 20 | 5-8 |
| | 9" x 11" (23 cm x 28 cm) | | | TX3217 | 20 | 24 | 5-8 | B-D |
| | Polypropylene | PolySat® | 9" x 11" (23 cm x 28 cm) | TX3213 | 50 | 20 | 5-8 | B-D |
| 9" x 11" (23 cm x 28 cm) | | | TX3216 | 20 | 24 | 5-8 | B-D | |
| Ethanol 70% | Polyester/Cellulose | TechniCloth® | 7" x 11" (18 cm x 28 cm) | STX1068 | 50 | 20 | 5-8 | B-D |
| | Polyester | Vertex® HS | 12" x 12" (30 cm x 30 cm) | TX3044P | 25 | 5 | 3-7 | A-D |

Mop and Bucket Systems

COMBINATION A

- (3) TX7054 Rectangular Buckets
- (1) TX7043 Wringer
- (1) TX7046 Cart
- (1) TX7046E Cart Extender
- (1) TX7108A AlphaMop™



COMBINATION B

- (2) TX7057 Round Buckets
- (1) TX7041 Wringer
- (1) TX7046 Cart
- (1) TX7092 BetaMop®



COMBINATION C

- (1) TX7060 Red Bucket
- (1) TX7061 Blue Bucket
- (1) TX7062 Green Bucket
- (1) TX7043 Wringer
- (1) TX7046 Cart
- (1) TX7108 AlphaMop™



COMBINATION D

- (2) TX7054 Rectangular Buckets
- (1) TX7043 Wringer
- (1) TX7046 Cart
- (1) TX7108A AlphaMop™



COMBINATION E

- (2) TX7058 Round Buckets
- (1) TX7046 Cart
- (1) TX7106 BetaMop®
- (2) STX7099 Bucket liners



COMBINATION F

- (3) TX7060 Rectangular Bucket
- (1) TX7043 Wringer
- (1) TX7046 Cart
- (1) TX7108 AlphaMop™



COMBINATION G

- (1) TX7065 Caster Bucket
- (1) TX7041 Wringer
- (1) TX7092 BetaMop®
- (1) TX651 TexQ® Disinfectant
- (1) STX7072 Sterile refill



COMBINATION H

- (1) TX7063 Dual-Bucket & Wringer
- (1) TX7125 BetaMop®
- (1) TX7070 BetaMop® Microdenier String refill



For more information see [Texwipe's Cleanroom Mops Brochure](#) (click here)

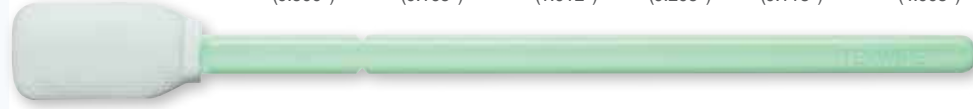
Cleaning Validation

Engineered to deliver consistent and accurate sample recovery for cleaning validation for both specific (HPLC, UV-Vis, IMS) and nonspecific (TOC) analytical methods. The swabs are effective with a wide range of diluents.

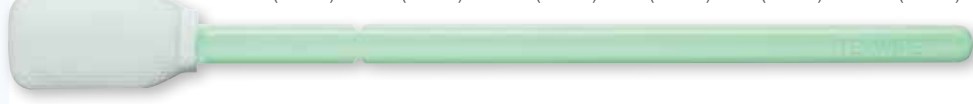
Alpha®

Alpha series swab additionally processed to <50 µg/L TOC per swab.

| Part No. TX714K | Head Width | Head Thickness | Head Length | Handle Width | Handle Thickness | Handle Length | Total Swab Length | Packaging |
|------------------------|-----------------|----------------|-----------------|----------------|------------------|------------------|-------------------|--------------------------------------|
| | 12.7mm (0.500") | 4.2mm (0.165") | 25.7mm (1.012") | 5.2mm (0.205") | 3.0mm (0.118") | 101.8mm (4.008") | 127.5mm (5.020") | 20 swabs per bag 50 bags per case |



| Part No. TX715 | Head Width | Head Thickness | Head Length | Handle Width | Handle Thickness | Handle Length | Total Swab Length | Packaging |
|-----------------------|-----------------|----------------|-----------------|----------------|------------------|------------------|-------------------|---|
| | 12.7mm (0.500") | 4.2mm (0.165") | 25.7mm (1.012") | 5.2mm (0.205") | 3.0mm (0.118") | 101.8mm (4.008") | 127.5mm (5.020") | 100 swabs per bag 2 inner bags of 50 swabs 10 bags per case |



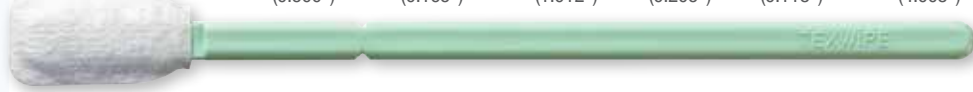
| Part No. TX761K | Head Width | Head Thickness | Head Length | Handle Width | Handle Thickness | Handle Length | Total Swab Length | Packaging |
|------------------------|----------------|----------------|-----------------|----------------|------------------|------------------|-------------------|--------------------------------------|
| | 6.8mm (0.268") | 2.8mm (0.110") | 16.8mm (0.661") | 3.2mm (0.126") | 3.2mm (0.126") | 145.5mm (5.728") | 162.3mm (6.390") | 20 swabs per bag 50 bags per case |



Absorbond®

Surfactant-free Absorbond Series swab for HPLC/IMS analysis.

| Part No. TX716 | Head Width | Head Thickness | Head Length | Handle Width | Handle Thickness | Handle Length | Total Swab Length | Packaging |
|-----------------------|-----------------|----------------|-----------------|----------------|------------------|------------------|-------------------|--------------------------------------|
| | 12.7mm (0.500") | 4.2mm (0.165") | 25.7mm (1.012") | 5.2mm (0.205") | 3.0mm (0.118") | 101.8mm (4.008") | 127.5mm (5.020") | 20 swabs per bag 50 bags per case |



For more information see [Texwipe's Cleanroom Swabs Brochure](#) (click here)



TX3340
TOC Cleaning
Validation Kit

TOC Cleaning Validation Kits

Texwipe's TOC Cleaning Validation Kits are designed to simplify sampling as part of a cleaning validation protocol. The swabs and vials are further cleaned using a proprietary processes to make these kits excellent for use in Total Organic Carbon (TOC) analysis.

The kits are an organized, convenient and secure method for transporting swabs and vials from storage area to sampling sites to laboratory with minimal chance of contamination. Packaged in cleanroom-compatible, recyclable polypropylene boxes.

Available with Texwipe Cleanroom Swab TX714K (TX3340 and TX3342) or TX761K (TX3343).

| Product Number | Description | Packaging |
|----------------|--|--------------|
| TX3340 | TOC Cleaning Validation Kit: 12 vials + 24 swabs (TX714K) + 12 labels | 18 kits/case |
| TX3342 | TOC Cleaning Validation Kit, Bulk: 72 vials + 144 swabs (TX714K) + 72 labels | 1 kit/case |
| TX3343 | TOC Cleaning Validation Kit: 12 vials + 24 swabs (TX761K) + 12 labels | 18 kits/case |

Texwipe's Rotation Recommendations

| Microbe to be killed | Disinfectants to be used | How often to use | Remove disinfectant residues |
|---|---|---|--|
| Bacteria Viruses Fungi | Rotate Bactericidal Disinfectants <ul style="list-style-type: none"> • TexQ® disinfectant and • TexTab™ (Use bactericidal dilutions) | <p>Use daily (for example, at the beginning and/or at the end of the shift);</p> <p>Change weekly (for example, 1st week – use TexQ®, 2nd week – use TexTab™)</p> | TexP™ Hydrogen Peroxide Solution |
| Bacterial Spores (C. Diff) | Use Sporicidal Disinfectants <ul style="list-style-type: none"> • TexCide™ or • TexTab™ (Use sporicidal dilutions) | <p>Use once a week, or every 2 weeks (for example, on Fridays, at the end of the last shift)</p> | 70% IPA Sterile or non-sterile |

Sample ISO Class 5 Cleaning Frequency

| Surface | Each Shift | Daily | Weekly | Monthly | Quarterly |
|---------------------|------------|-------|----------------|---------|-----------|
| Trash | ✓ | | | | |
| Gowning room | ✓ | | | | |
| Floors | ✓ | | | | |
| Equipment | ✓ | | | | |
| Furniture | ✓ | | | | |
| Doors | | ✓ | | | |
| Windows | | ✓ | | | |
| Walls | | | twice weekly ✓ | | |
| Ceiling | | | | ✓ | |
| Under raised floors | | | | | ✓ |

Source: IEST-RP-CC-018.4, "Cleanroom Housekeeping: Operating and Monitoring Procedures," p. 13, Table 1.

"A risk assessment should be performed to determine the appropriate frequency for the user. This table is an example of the frequency of cleaning for an average ISO Class 5 cleanroom operation."



| | |
|--------------------|-------------------|
| Americas | +1 336 996 7046 |
| EMEA | +31 88 1307 410 |
| Philippines | +63 49 543 0241 |
| China | +86 512 6303 3700 |

texwipe.com