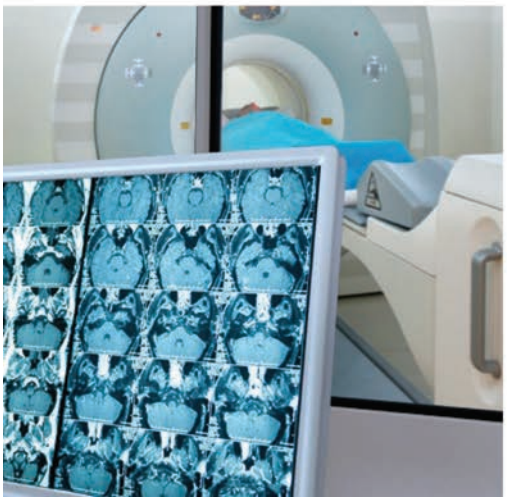
Sani-Cloth® Wipes Materials Compatibility Reference Guide







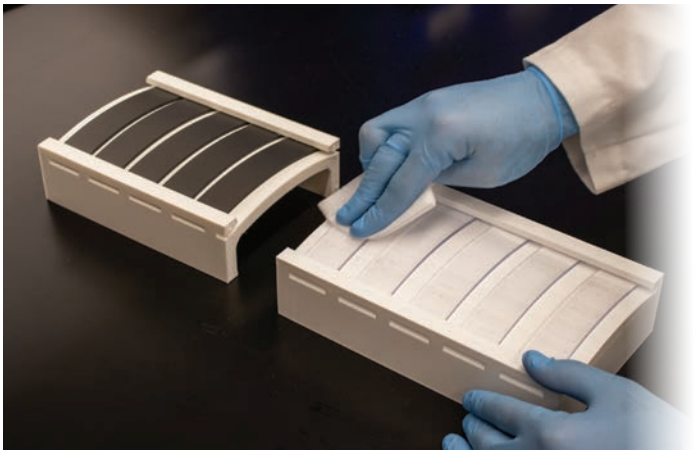


COMPATIBLE by design™

PDI® BE THE DIFFERENCE

PDI's Compatibility Approach.

Our scientists use a variety of ASTM and ISO material testing standards to understand the effects of our disinfectants on common material surfaces.



Wipe test:

Material surfaces were wiped 120 times with a 30-minute dry period between each wipe. Simulates time-dependent material exposure in a healthcare setting.

Wipe test under constant strain:

Materials were wiped 120 times with a 30-minute dry period between each wipe under 1% constant strain. Simulates time-dependent material exposure under strain in the healthcare setting.

Immersion test:

Coupons of the materials were wrapped inside the disinfectant wipe and placed inside Ziploc-type bags. Three times each week, the test samples were unwrapped and inspected for deleterious effects. Observations were noted and fresh wipes were used to wrap the test surfaces and continue the exposure. This method examines the durability of the material under extreme chemical exposure.

We have partnered with industry leaders in raw material manufacturing for medical devices to evaluate our broad family of products on thermoplastic chemical resistance.[1,2,3,4,5]

PDI's **Compatible by Design**™ System.

Legend

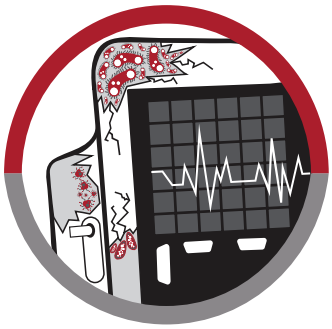
●●●	No visible surface change (damage/degradation) to the material is likely to occur when used according to the directions for use.
●●	Some visible effects or cosmetic changes such as streaking, discoloration, or clouding, may be observed with long-term exposure.
●	Visible surface change (damage/degradation) may occur with long-term exposure.

Material Compatibility Reference Guide

	Surface material	Found in	Super Sani-Cloth® Wipes	Sani-Cloth® Prime Wipes	Sani-Cloth® Bleach Wipes	Sani-Cloth® AF3 Wipes	Sani-Cloth® Plus Wipes	Sani-HyPerCide® Wipes
Polymers	Polymethyl Methacrylate (PMMA)	Incubators, infusion pumps, phone displays, dialyzers, X-ray protective shields	●●●	●●	●	●●●	●●	●●
	High Density Polyethylene	Chemical containers, cable insulation, packaging, electrical device enclosures, trays, industrial plastic products	●●●	●●	●●	●●	●●	●●
	Acrylonitrile Butadiene Styrene (ABS)	Keyboards, infusion pumps, inhalers, tracheal tubes, ventilator valves, electrical device enclosures, medical masks, medical devices for blood access	●●●	●●	●●●	●●	●●	●●
	Polypropylene	Surgical trays, device exteriors, membrane oxygenators, tubing connectors, plastic bottles	●●●	●●●	●●	●●	●●	●●
	Polycarbonate	Infusion pumps, anesthesia containers, IV lock box, safety goggles, hemodialysers, blood oxygenators, blood reservoirs, surgical instruments, endoscopic appliances, lenses, IV connectors	●●	●●	●●	●●	●●	●●
	Marlite®[6]	Wall panels	●●●	●●●	●●●	●●●	●●●	●●●
	Polyvinyl Chloride	Blood and dialysis bags, IV bags, tubing, oxygen masks, catheters, floors. electrical cords, furniture, mattress covers	●●●	●●●	●●●	●●●	●●●	●●●
	Tritan™[7] Copolyester	Clear device components	●●●	●●	●●●	●●●	●●●	●●●
	3Form™ Varia™[8]	Formable acrylic sheets	●●●	●●●	●●●	●●●	●●●	N/A
Fabrics	Polyurethane	Upholstery, hospital bedding, head supports, armrests, surgical drapes, gaskets, lights, tubing, mattress covers	●●●	●●●	●	●●●	●●●	●●●
Metals	Brass C260	Scalpels, scissors, pipe fittings	●●	●●	●	●	●●●	●
	Aluminum 6061	Stethoscopes, scalpel, surgical trays, isolation carts, containers, gurneys, seating, monitors, handrails, walkers, wheel chairs, surgical lights	●●	●●	●●●	●●	●●	●●
	Galvanized Steel	Carts, ductwork, pipes, nails, bolts	●●●	●●●	●	●●	●●●	●
	Stainless Steel 316	OR tables, case carts, cabinets, carts, trolleys, wheelchairs, sinks, thermometers, hemostats, tweezers, forceps, bed frames, furniture, fixtures, counters	●●●	●●●	●	●●	●●	●●
	Aluminum Silicate	Fixtures, insulators, Instrument trays, walkers, crutches, folding stretchers	●●●	●●●	●●	●●●	●●●	●●●
Hard Porous Surfaces	Ceramic	Pressure sensors, hand tools, valves, tiles	●●●	●●●	●●●	●●●	●●●	●●●
	Porcelain	Bathrooms	●●	●●	●●●	●●●	●●	●●●
	Marble	Decorative countertops	●●●	●●●	●●●	●●●	●●	●●●

The challenge: equipment damage.

Incompatible cleaning and disinfection products in healthcare creates dangerous safety issues for patients, costs healthcare facilities millions of dollars annually, and impedes effective cleaning and disinfection.

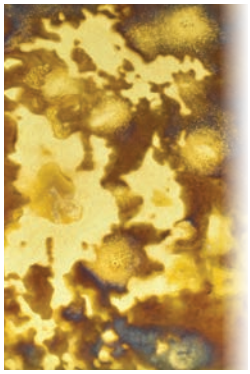


Biomedical engineers estimate a 20-27% equipment life span reduction due to incompatible disinfectants.[9]

Types of surface change.

Exposure to disinfectants can lead to degradation of surfaces and, for plastics, environmental stress cracking (ESC).

Discoloration



Material's surface changes color due to environmental conditions. Often described as fading, yellowing, staining, darkening, bleaching, spotting, etc.

Residue

Material remaining on the surface after the solvent or additives have evaporated. Residue is unsightly but often removable.

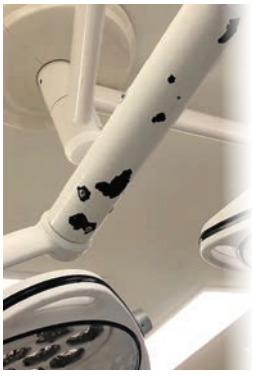
Cracking

Material failure, fracture, crack, and crazing described as localized deformation occurring in a material.

Corrosion

Gradual deterioration of materials caused by a chemical reaction on the surface. Can lead to pitting, rusting, deformation, etc.

Delamination



Mode of failure where a material fractures into layers along a plane parallel to a surface.

Guidance from the CDC, FDA and Joint Commission.

"Disinfect noncritical surfaces and medical devices with an EPA-registered hospital disinfectant using the label's safety precautions and use directions."[10]

- CDC from "Guideline for Disinfection in Healthcare facilities"

"FDA recommends that you validate your disinfection processes and instructions. FDA also recommends that you follow the recommendations in device-specific FDA guidance documents or any relevant FDA-recognized standards."[11]

- FDA from "Reprocessing Medical Devices in Health Care Settings: Validation Methods and Labeling"

The goal of our Compatible by Design Program is to help your facility meet the requirements of your accreditation organization.

The truth behind the formulation.

In the fight against hospital acquired infections (HAIs), material and equipment compatibility is critical. While active ingredients are readily available, we must remember the inactive ingredients (additives and solvents) and other variables, i.e., pH, that impact overall compatibility.

PDI recommends our customers always check the device manufacturer's Instructions For Use for guidance on compatible disinfectants.

Why is compatibility complex?

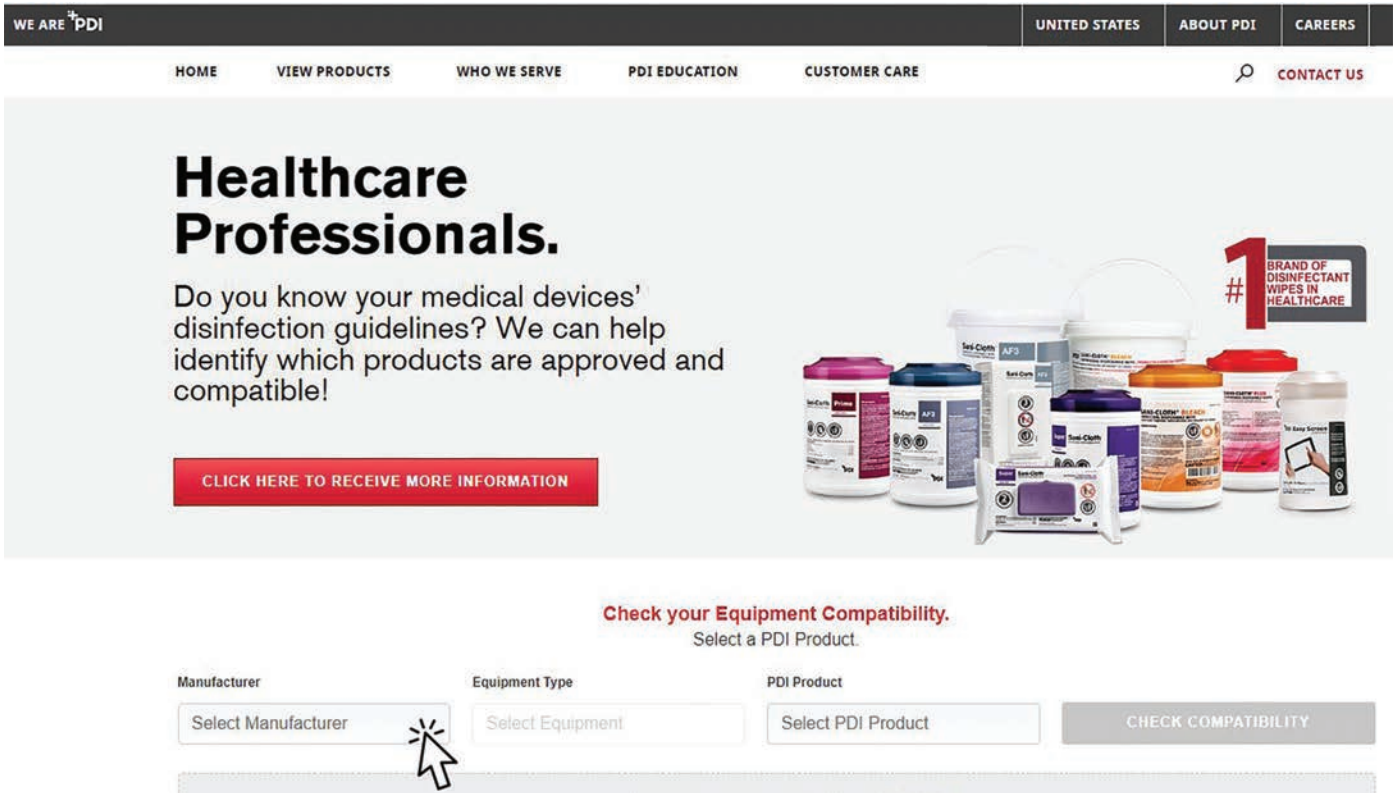
+ Composition of disinfectant: active ingredient, solvent, and other additives.
+ Frequency of disinfection.
+ Environmental conditions i.e, temperature, humidity, etc.
+ Diversity of surface materials.

Why pH matters.

Acidic and alkaline disinfectant solutions have a higher rate of corrosion compared to neutral solutions.

Common surface materials found in a patient room.

PDI's Compatibility Search Tool.



Scan here to learn more about PDI's Compatibility Search Tool or go to https://pdihc.com/compatibility-hcp

PDI's compatible disinfectants.

Sani-Cloth® Prime Germicidal Disposable Wipe

Powered by a next generation formulation effective against HAI causing pathogens in just 1 minute.

DISINFECTS IN 1 MINUTE · KILLS 56 MICROORGANISMS · DISINFECTANT QUAT/ ALCOHOL FORMULATION

Sani-HyPerCide® Germicidal Disposable Wipe

A powerful, ready to use hydrogen peroxide formula designed to address HAI causing microorganisms, including *Clostridioides difficile.*

DISINFECTS IN 1 MINUTE · KILLS 24 MICROORGANISMS · EFFECTIVE AGAINST C.DIFF 5 MINUTES

Super Sani-Cloth® Germicidal Disposable Wipe

Ideal for daily use in fast-paced environments that require a short contact time and broad coverage of microorganisms.

DISINFECTS IN 2 MINUTES · KILLS 32 MICROORGANISMS · DISINFECTANT QUAT/ ALCOHOL FORMULATION

Sani-Cloth® AF3 Germicidal Disposable Wipe

Alcohol free. Fragrance free. Worry free. Ideal for use around patients and staff, especially those with respiratory sensitivities.

DISINFECTS IN 3 MINUTES · KILLS 45 MICROORGANISMS · DISINFECTANT QUAT ALCOHOL FREE FORMULATION

Sani-Cloth® Plus Germicidal Disposable Cloth

A low-level disinfecting wipe for general surface disinfection.

DISINFECTS IN 3 MINUTES · KILLS 18 MICROORGANISMS · DISINFECTANT QUAT FORMULATION [12]

Sani-Cloth® Bleach Germicidal Disposable Wipe

Ideal for disinfecting areas contaminated with *Clostridioides difficile* spores and Norovirus.

DISINFECTS IN 4 MINUTES · KILLS 50 MICROORGANISMS · DISINFECTANT 1:10 BLEACH DILUTION FORMULATION

Educational and point-of-care accessories.

Developed to assist you in facility protocol compliance.

PDI Sani-Bracket®
for wall/pole mounting of a canister

Sani-Canister Caddy®
for placement on flat surfaces (bilingual)

Sani-TAG® Equipment ID System
for identification of equipment to ensure the proper wipe is used on a particular piece of equipment

Educational Wall Charts and signage (bilingual)

Order information.

Sani-Cloth® Prime Germicidal Disposable Wipe

Powered by a next generation formulation, help protect your patients, staff, and facility from HAIs in just 1 minute.

	REORDER NO.	WIPE SIZE	CASE PACK	CASE WGT	CASE CUBE	PALLET TI/HI
Large Canister	P25372	6″ x 6.75″	12/160s	30.47 lbs	1.430 ft	10/3
X-Large Canister	P24284	7.5″ x 15″	6/70s	18.44 lbs	0.936 ft	10/4
Large Individual Packet	H06182	5″ x 8″	10/50s	9.99 lbs	0.636 ft	17/4
X-Large Individual Packet	U13195	11.5″ x 11.75″	3/50s	8.94 lbs	0.500 ft	24/3

Sani-HyPerCide® Germicidal Disposable Wipe

A ready to use hydrogen peroxide formula designed to address HAI causing microorganisms, including *Clostridioides difficile* without compromising compatibility.

Large Canister	P27372	6″ x 6.75″	12/160s	26.49 lbs	1.430 ft	10/3
X-Large Canister	P26584	7.5″ x 15″	6/65s	15.04 lbs	0.936 ft	10/4

Super Sani-Cloth® Germicidal Disposable Wipe

2 minute contact time allows for a quick room turnover. Ideal for daily use in fast-paced environments that require short contact times and broad coverage of microorganisms.

Large Canister	Q55172	6″ x 6.75″	12/160s	26.04 lbs	1.430 ft	10/3
X-Large Canister	P86984	7.5″ x 15″	6/75s	15.56 lbs	0.936 ft	10/4
Large Individual Packet	H04082	5″ x 8″	10/50s	8.03 lbs	0.539 ft	20/4
X-Large Individual Packet	U87295	11.5″ x 11.75″	3/50s	7.19 lbs	0.500 ft	24/3
Softpack	A22480	8.2″ x 9.8″	9/80s	16.58 lbs	0.948 ft	10/4

Sani-Cloth® AF3 Germicidal Disposable Wipe

Helping to protect your staff, patients, and residents has never been easier! Alcohol and fragrance-free formula is ideal for use around those with respiratory sensitivities.

Large Canister	P13872	6″ x 6.75″	12/160s	26.04 lbs	1.430 ft	10/3
X-Large Canister	P72584	7.5″ x 15″	6/75s	16.71 lbs	0.936 ft	10/4
Large Individual Packet	H59200	5″ x 8″	10/50s	8.14 lbs	0.539 ft	20/4
X-Large Individual Packet	U27500	11.5″ x 11.75″	3/50s	7.67 lbs	0.500 ft	24/3
Pail	P1450P	7.5″ x 15″	2/160s	12.40 lbs	0.953 ft	10/5
Refill (for Pail)	P2450P	7.5″ x 15″	2/160s	11.10 lbs	0.529 ft	18/4

Sani-Cloth® Plus Germicidal Disposable Wipe

Ideal for use in alternate care settings, including physician and dental offices.

Large Canister	Q89072	6″ x 6.75″	12/160s	26.14 lbs	1.430 ft	10/3
X-Large Canister	Q85084	7.5″ x 15″	6/65s	14.85 lbs	0.936 ft	10/4

Sani-Cloth® Bleach Germicidal Disposable Wipe

Ideal for disinfecting areas contaminated with *Clostridioides difficile* spores and Norovirus.

Clinical Size Wipes Canister	P84172	6″ x 5″	12/160s	26.86 lbs	1.430 ft	10/3
Large Canister	P54072	6″ x 10.5″	12/75s	26.50 lbs	1.430 ft	10/3
X-Large Canister	P25784	7.5″ x 15″	6/65s	19.79 lbs	0.936 ft	10/4
Large Individual Packet	H58195	5″ x 7″	10/40s	8.25 lbs	0.505 ft	19/5
X-Large Individual Packet	U26595	11.5″ x 11.75″	3/40s	8.20 lbs	0.500 ft	24/3
Pail	P7007P	7.5″ x 15″	2/160s	16.50 lbs	0.953 ft	10/5
Refill (for Pail)	P700RF	7.5″ x 15″	2/160s	15.60 lbs	0.529 ft	18/3

Scan here to learn more about PDI's compatibility partnerships or go to https://pdihc.com/equipment-compatibility

[1]Data on file. Compatibility study 8-23.2017.
[2]Zettel, M., Liu, Y., Lamont, M., Bernhard, K. and Hicks J., October 2022. "Standard test method for evaluation of chemical resistance of thermoplastics for non-disposable medical devices- a voice from industry collaboration through the COVID-19 pandemic". Medical Design Briefs. https://www.medicaldesignbriefs.com/component/content/article/mdb/pub/features/articles/46685.
[3]Esposito, A. October 2016. "PDI and SABIC join forces to test medical devices to improve patient protection from infection". Medical Design & Outsourcing. https://www.medicaldesignandoutsourcing.com/pdi-sabic-join-forces-test-medical-device-plastics-help-improve-patient-protection-infection/
[4]Ratnagiri, R., and Martin, R. (2022). Resistance of DuPont polymers to disinfecting chemicals, including those effective against the SARS-CoV-2 virus. [White paper], Dupont. https://www.dupont.com/content/dam/dupont/amer/us/en/mobility/public/documents/en/Home-Appliance-Whitepaper-FNL.pdf
[5](2020). Covestro Polycarbonates: Compatibility with Disinfectants used against SARS-CoV-2. [White paper], Covestro. https://solutions.covestro.com/-/media/covestro/solution-center/whitepapers/cov-chemical-compatibility-to-disinfectants-used-against-sars-cov-2-2020-06.pdf
[6]Marlite® is a registered trademark of Marlite, Inc.
[7]Tritan™ is a trademark of Eastman Chemical Company.
[8]3Form™ and Varia™ are trademarks of 3Form, LLC
[9]Data on file. Compatibility Study 8-28-17.
[10]https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html#rec5g
[11]https://www.fda.gov/regulatory-information/search-fda-guidance-documents/reprocessing-medical-devices-health-care-settings-validation-methods-and-labeling
[12]**Sani-Cloth**® Plus Germicidal Disposable Cloth compares to competitor quat/low-alcohol disinfectant products.

PDI®
BE THE DIFFERENCE