VELTEK ASSOCIATES, INC.

INNOVATORS FOR

CONTAMINATION CONTROL

STERILE.COM


FULL CIRCLE APPROACH
DISINFECTANTS, SPORICIDES, & CLEANERS
via VAI®'s Extensive and Unique Product Lines
CAPTURE CONTAMINATION
via the SMA® Microbial Air Sampler Systems
PERSONNEL GOWNING
Easy2Gown System®
ID CONTAMINATION
Genetic Sequencing via VAI Laboratories
CIP AND CAGE CLEANERS
Process2Clean, Cage2Wash, and CORE Labs
CONSULTING & TRAINING SERVICES
Aseptic Processing, Inc.SM
CLEANROOM WIPERS
via VAI's Sterile Saturated and Dry Wipers
APPLICATION DEVICES
Core2Clean® Plus and Bucket Systems

Innovative Solutions You Can Trust

Every day, the people of Veltek Associates, Inc. make amazing things happen—from revolutionary discoveries, to exceptional customer service, to consistent and quality manufacturing. As a result, we remain the cleanroom industry's most trusted source for innovation, quality, and service.

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SCMD

WIPES

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LABS

API

Company at a Glance

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Founded:	1981
Headquartered:	Malvern, Pennsylvania (suburban Philadelphia)
Customers:	More than 500 companies worldwide
Employees:	140
Key Business Lines:	Sterile Chemicals, Viable Air Sampling, Particle Counting, Cleanroom Documentation Systems, RFID Tracking Systems, Disposable Garments, Process CleaningDetergents, Saturated & Dry Wipers, Cart Transfer Systems, Consulting, Cleaning Equipment
VAI Laboratories:	In-house testing and research facility
Web Site:	www.sterile.com
Phone:	1-888-4-STERILE (1-888-478-3745)

For more than 30 years, Veltek Associates, Inc. (VAI®), headquartered in Malvern, PA, has pioneered the design and manufacture of hundreds of cleanroom solutions. These innovations, many of them landmarks in the industry's history, allow our customers to overcome challenges and reach their business goals. Plus, VAI clients have more than a solutions provider, they have a partner and trusted advisor. With today's complex research challenges, new competition, and increasing government regulations, a true partnership is more important than ever.

VAI® was founded in 1981 by Arthur L. Vellutato, Sr. as a direct result of his answers to the challenges the industry faced. Our main goal, therefore, became developing simple and concise solutions to the common problems experienced within cleanroom operations.

Applying his more than 30 years of experience in finding alternative methods for established industry practices in the pharmaceutical industry, his leadership of VAI resulted in a continuous stream of successful products that is still carried on today.

If one word was synonymous with VAI it would be innovation. Since its founding, VAI has followed two corporate principles—listen and innovate. Together with our customers, we have designed and manufactured countless products and services that are designed to meet current industry needs, as well as serving the industry for years to come.

After Arthur L. Vellutato, Sr.'s passing in 2009, his son, Arthur L. Vellutato, Jr., took over as president and CEO of VAI after over 20 years serving as the Director of Sales, Marketing, and Technical Operations. Arthur L. Vellutato, Jr. brought his love of VAI and constant attention to customer satisfaction to his new role as leader and driving force of VAI's continued success.

With its continued strong growth, VAI is poised to create innovative products and services to further simplify and advance the pharmaceutical, biotechnology, and research and development industries. Our inspiration is to use the knowledge we have acquired along with the assistance of our customers to continue developing alternative methods to aid and simplify established industry practices, as well as create new and innovative processes.

Our promising future will be built upon our past successes and driven by our unwavering commitment to our customers and innovation.

For us, it's simple. Innovation is about listening to industry challenges and not stopping until we find the answer. Together with our clients, we have been developing new solutions for the cleanroom industry for more than 30 years.

Our innovations have allowed our clients to do remarkable things—from biotechnology breakthroughs to pharmaceutical discoveries—that help millions of people every day. From our early days of developing the first sterile garments to our latest innovations, VAI® develops products that revolutionize and simplify aseptic manufacturing. We encourage you to discuss your needs with our technical representatives by calling 1-888-4-STERILE.

1981
We produced the first disposable garments manufactured, from start to finish, in a cleanroom environment. From that point on, manufacturers were assured the cleanliness of the final product.

1985
Four years later, we designed the SMA®, the first microbial air sampler that could be completely sterilized.

1993
VAI scientists developed the first 0.2 micron filtered alcohol that was irradiated sterile in a non-aspirating aerosol spray container and in bulk containers. That same year, we developed the first sterilized disinfectants and sporicides that were filtered at 0.2 microns and packaged in unit dose and bulk containers.

1996
We introduced the first 0.2 micron filtered and sterilized cleanroom lubricants, bringing a new level of flexibility and security to cleanroom environments.

1997
We designed and manufactured the first sterile ingredients for use in parenteral manufacturing and introduced the first computerized microbial air sampling system.

2000
VAI developed the Core2Clean® Spray/Mop/Fog System that modernized the way cleaning and disinfection was accomplished in the industry by providing an all-in-one, versatile unit to replace conventional cleaning equipment.

2003
VAI developed the SimpleMix® System, the first sealed, multi-chamber container that houses both VAI® WFI Quality Water and the correct use dilution sporicide or disinfectant.

2006
The complete line of Process2Clean products are released. Designed specifically for critical clean-in-place applications, these products are VAI's most effective solution for preventing and removing product residues and help assure contamination control.

VAI Malvern, PA Headquarters

2008

VAI® took garments to a new level with the Easy2Gown System®. Our patented fold provides technicians with fewer garment manipulations. This results in reduced training time, reduced down time, reduced contamination risk, and increased manufacturing time.

2009

VAI has answered the needs of the pharmaceutical industry by developing the first sterile sodium hypochlorite (HYPO-CHLOR®) and hydrogen peroxide (STERI-PEROX®) wipes for use in cleanroom environments.

2011

First EPA registered 70% Isopropyl alcohol and Water for Injection.

2012

Patented and marketed the first viable facility microbial monitoring system that incorporates plate bar code reading and data exchange to LIMS and other software systems.

2013

SMA® takes viable monitoring to a new level with the SMA OneTouch® ICS, a computerized, automated viable air monitoring system.

2014-2015

CleanPrint 10® synthetic writing substrate is used for our Core2Write® products, a line of pre-printed logbooks, ID tags, and labels customized for the users' needs. VAI makes printing in a controlled area possible with the Core2Print® cleanroom printing system that uses CleanPrint 10 non-shedding paper.

2016

VAI revolutionizes the previously arduous task of cleanroom cart transferring and makes it simple, with Cart2Core™, by allowing the cart top to be detached from its base, therefore leaving the contamination behind.

2017

Clean and sterile end-to-end cleanroom and controlled environment tracking with RFID, QR, and Barcode technology becomes feasible with VAI's Core2Scan System. Entire operations can be tracked automatically without exacerbating contamination.

2018

VAI introduces a new line of particle counters. The SMA MicroParticle ICS™ units utilize the latest innovations in particle counting technology and integrate severak features not found in other Particle Counters.

Knowledge, Experience, and Partnership

More than 500 pharmaceutical, biotechnology, and healthcare clients around the world turn to VAI® because we understand the challenges they face. Our experience and unsurpassed technical expertise means "real-world" solutions from customers who have worked in the industry. Due to extensive product lines, a relationship with VAI means a cost-effective way to buy cleanroom products.

At VAI, we develop our products in an environment that mimics your environment, providing a seamless development process that ensures accuracy and precision. When you work with us, you get recommendations from technical experts who have extensive industry experience, not just sales people. This means you get exactly what you need, and nothing you don't.

Complete and documented efficacy performance and testing to prove the removal of existing contamination is a costly and time-consuming task. For this reason, VAI has responded by establishing VAI Laboratories, a microbiological testing facility capable of performing time contact kill studies, disinfectant validation services, and microbial identification. In addition, the VAI Laboratories staff, who work daily in GMP settings, will consult with each client to ensure they achieve best-in-class cleanroom operations and contamination control. These value-added services provide our clients with timely advice and proven solutions, all within the framework of regulatory requirements.

At VAI, we strive to develop meaningful, long-term relationships with our clients to help reduce expenses, eliminate waste, and simplify manufacturing. Plus, our products are designed to build upon each other, so as you grow, you know you can count on us. Call us today at 1-888-4-STERILE or visit www.sterile.com.

Welcome to SCMD

Sterile Chemical Manufacturing Division

VAI®'s SCMD manufacturing operations mirror current GMP's and enforce the adherence to USP specifications for testing of all manufactured products, where applicable. VAI is an EPA and FDA registered facility and possesses worldwide registrations. SCMD has designed and produced a complete range of sterile and non-sterile sanitizers, disinfectants, sporicides, lubricants, waters, and cleaners for controlled manufacturing areas and classified operations.

SCMD represents a majority of the square footage of the Malvern, PA and Exton, PA facilities. All VAI manufacturing operations are completely validated and assure that critical validation parameters are within tolerance to assure product integrity. VAI capabilities for manufacturing products include the ability to fill aerosol, bulk, and unit dose packages in ISO 5 (Grade A/B, former Class 100). Our aseptic filling operations are coupled with the validated and proven ability to irradiate a final product. Absolute assurances are taken in every aspect of SCMD concerning sterility and particulate removal.

SCMD has taken an additional advancing step in product quality assurances by incorporating USP Water for Injection (WFI) into a majority of our products. The validated WFI systems in our chemical manufacturing facility offer an advantage to the use of our products. The mission of VAI's SCMD is to manufacture top-of-the-line quality products that address any regulatory requirements demanded.

SCMD has the manufacturing capability to produce both VAI products and contract custom manufacturing designs. VAI's SCMD uncompromising cGMP manufacturing style and our complete adherence to USP specifications has assured outside organizations that their products will not only be produced and tested as sterile, but moreover, their product will be completely documented, traceable, and validated. VAI's SCMD is proud of our history and track record.

Sterile Chemical Manufacturing Division (SCMD)

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DECON-ASSURE
Biodecontamination Program

The DECON-ASSURE Biodecontamination Program® has been developed to assist you in maintaining acceptable environmental conditions while addressing the requirements of regulatory agencies. "Testing and Addressing" contamination in a documented system is the goal of the DECON-ASSURE Biodecontamination Program. The following is a brief summary.

Criteria # 1: Test And Address Contamination

Through your environmental monitoring program, you can develop a list of environmental isolates that have been noticed in your operations. Once developed, the key is to successfully integrate and document a plan for assuring the demise of these organisms.

Criteria # 2: Antimicrobial Effectiveness Studies

Determining what chemical agents will destroy a known level of your environmental isolates is the next step. Prior to conducting either a Time Contact Kill Study (Tube Dilution), a Time Contact Kill Study (On User Surfaces), or an AOAC Protocol Study, you will need to review the available disinfecting agents and determine which is initially appropriate for your operation. Upon choosing 1 or 2 disinfecting agents and a sporicide, you can continue with our antimicrobial effectiveness studies. Antimicrobial effectiveness studies must be based on realistic bioburdens that may be observed in your controlled areas. It is normal to test an enumeration greater than or equal to 1.0×10^4 cfu's. This testing will provide the justification for using our chemical agents.

DECON-ASSURE
Biodecontamination Program® (Continued)

Criteria # 3: Choosing A Disinfection System

Varying applications require various solutions to be in place. VAI® has established three systems that will net success. The choice to use a phenolic, quaternary ammonium, or hydrogen peroxide delineates the rotation parameters. The choice of one disinfectant and a sporicide is completely appropriate, however, some may decide to rotate similar disinfectants while also utilizing a sporicide.

Rotation systems are designed to address known or possibly existent contamination with proven efficacious disinfectants. The basis for the rotation of disinfecting or sporicidal agents is to address an organism that may not be destroyed by a particular disinfectant with another that has proven efficacy performance against the organism. For example, a phenol, while being effective against other contamination, may not kill a *B. subtilis* in a 5-10 minute contact time. Therefore, the rotation to a more efficacious product, such as a sporicide, may be warranted to destroy this organism. Even though organisms do not develop an immunity or resistance to a chemical agent over time, scientific evidence of such occurrences have never been documented as factual in the cleanroom. Thus, the basis for rotation is to address the organism that is not destroyed by, nor ever was destroyed by one chemical agent, with another that has proven efficacy and performance against such organism.

Destroying contamination in a cleanroom operation requires addressing the known vegetative cells and the spores. In the present design of a rotation system, there are two types: 1) A single disinfectant rotated with a sporicide, and 2) A two disinfectant system (rotated monthly) plus a sporicide. Either system requires, at minimum, a monthly sporicidal application. This frequency may be increased or decreased and is determined by the environmental conditions.

The use of DECON-CLEAN® is considered an optional step in controlling existent residues and should be done at least once a quarter (suggested monthly). Furthermore, to assure that all cleaning is effective, DECON-AHOL WFI® or STER-AHOL® WFI should be used on process equipment as a final wipe down.

Criteria # 4: Conducting An "In-Situation" Field Study

Once a disinfection system has been chosen and antimicrobial effectiveness testing has been completed, conducting an "in situation" field study is important to prove the effectiveness of the combination of our cleaning Standard Operating Procedures (SOP's) and our antimicrobial effectiveness testing. Simply, environmental monitoring (both air and surface) is conducted in a dirtied room. Upon completion of the monitoring, the room is cleaned and disinfected per the current SOP's. Upon completion and drying of all surfaces, the room is monitored again. Satisfactory results need to be obtained in 3 different and separate in-situation field studies prior to acceptance of the disinfection system.

Criteria # 5: Updating Your Profile

As time progresses, it is possible that organisms not previously tested may be noticed in operations. Antimicrobial effectiveness testing should be performed on these contaminants to continue to prove and document the disinfection system as validated to current operations. Changes over time may also occur in production scenarios, processes, and personnel. Reviewing SOP's for cleaning and disinfection should be done routinely to address current situations.

DECON-ASSURE
Biodecontamination Program® (Continued)

DECON-ASSURE Rotation Systems:

Month 1: Rotating One Disinfectant and a Sporicide

Day(s)	Phenolic	Quaternary Ammonium	Hydrogen Peroxide
Day 1-13	DECON-CYCLE®	DECON-QUAT® 100 or 200C	STERI-PEROX 3% or 6%
Day 14 (if warranted EM Data)	DECON-CLEAN® followed by HYPO-CHLOR® 0.52%, STERI-PEROX® 3% or 6%, or DECON-SPORE 200® PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.
Day 15-29	DECON-CYCLE	DECON-QUAT 100 or 200C	STERI-PEROX 3% or 6%
Day 30	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.

Month 2: Rotating Two Disinfectants and a Sporicide

Day(s)	Phenolic	Quaternary Ammonium	Hydrogen Peroxide
Day 1-13	DECON-PHENE®	DECON-QUAT 100 or 200C	STERI-PEROX 3% or 6%
Day 14 (if warranted EM Data)	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.
Day 15-29	DECON-CYCLE	STERI-PEROX 6%	DECON-QUAT 100 or 200C
Day 30	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.	DECON-CLEAN followed by HYPO-CHLOR 0.52%, STERI-PEROX 3% or 6%, or DECON-SPORE 200 PLUS.

After disinfection all critical surfaces should be rinsed with hot WFI or an IPA wipe down should be performed.

ABCD Cleanroom Introduction System®
Cleanroom Packaging System Available for Numerous VAI® Products

The ABCD Cleanroom Introduction System is a packaging system that allows operators/users to take the package through each level of classified areas by simply removing one bag at a time. Each bag acts as barrier protecting the finished product from becoming a carrier of viable and non-viable contamination. This prevents the need to decontaminate each outer bag prior to entering a cleaner area. In this packaging system, sterilized groups of containers are contained in two outer bags and after each are removed, individual containers are each additionally contained in two easy tear bags.

Sterile VAI Products available in our ABCD Cleanroom Introduction System are denoted as such in the Features and Benefits section of each product page.

Double Bagged
STER-AHOL® Product

DECON-AHOL WFI® FORMULA

70% USP Isopropyl Alcohol and 30% Water for Injection

DECWFI-SP-70


DECWFI-TR-04


DECWFI-SQ-16Z


DECWFI-B-70

VAI® 's EPA registered DECON-AHOL WFI® Formula is formulated with 70% USP Isopropyl Alcohol (IPA) and 30% Water for Injection (WFI). DECON-AHOL WFI® Formula 70% is an EPA registered hard surface disinfectant and sanitizer when used as directed.

DECON-AHOL WFI Formula Products have been designed specifically for pharmaceutical, biotechnology, healthcare, and medical device cleaning rotations for use in both aseptic and non-aseptic environments.

Quality and Manufacturing*

- Components are air washed with 0.2 micron filtered air before assembly
- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely lot traceable from start to finish
- Completely validated for sterility and shelf life
- Formulated with endotoxin free Water for Injection
- Assayed according to current USP Compendium
- Manufactured within a closed system where endotoxin levels are controlled

Features and Benefits*

- Each sterile container is double bagged
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Delivered with lot specific Certificate of Analysis, Certificate of Sterility, Certificate of Irradiation, and LAL Test Report
- Individually labeled with lot number and expiration
- Low remaining residue
- Low in endotoxin levels
- For use on a multitude of surfaces
- Ready-to-use

Product Uses*

- Where a sterile alcohol solution that is formulated with USP Water for Injection is required
- In spray and wipe downs on hard, non-porous, inanimate surfaces
- Aseptic filling, gowning rooms, general manufacturing areas, process lines
- Machinery, tools, tables, counters, laminar flow benches, carts, shelves
- Exterior packaging, accessories
- Glass, plastic, vinyl, stainless steel
- Gloves

Order Number	*Description*	*Qty/Cs*
DECWFI-SP-70	DECON-AHOL Aerosol WFI Formula, 11 oz Aerosol Spray/Mist, Sterile	24
DECWFI-ST-70	DECON-AHOL Aerosol WFI Formula, 11 oz Aerosol Stream, Sterile	24
DECWFI-SP-70-B	DECON-AHOL Aerosol WFI Formula, 11 oz Aerosol "Inverta" Spray/Mist, Sterile	24
DECWFI-TR-04	DECON-AHOL WFI Formula, 16 oz Attached Trigger, Sterile	12
DECTR-08	DECON-AHOL WFI Formula, 16 oz Attached Trigger, Sterile, Parametric	12
DECTR-01	DECON-AHOL WFI Formula, 16 oz Attached Trigger, Non-Sterile	12
DECWFI-TR-05	DECON-AHOL WFI Formula, 32 oz Attached Trigger, Sterile	12
DECTR-07	DECON-AHOL WFI Formula, 32 oz Attached Trigger, Non-Sterile	12
DECWFI-SQ-16Z	DECON-AHOL WFI Formula, 16 oz Squeeze, Sterile	12
DECWFI-B-70	DECON-AHOL WFI Formula, 1 Gallon, Sterile	4
DECWFI-B-70-NS	DECON-AHOL WFI Formula, 1 Gallon, Non-Sterile	4
DECWFI-B-5G-70	DECON-AHOL WFI Formula, 5 Gallon, Sterile	1
DECB-55G-70	DECON-AHOL WFI Formula, 55 Gallon, Non-Sterile	1
DECWFI-BOT-01	DECON-AHOL WFI Formula, 32 oz Bottle for ASEPTI-CLEANSE®, Non-Sterile	12
DECWFI-BOT-02	DECON-AHOL WFI Formula, 32 oz Bottle for ASEPTI-CLEANSE, Sterile	12

*All points do not apply to Non-Sterile products
Also available in saturated wipes. See pages 42, 46 and 47.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECON-AHOL® PRODUCTS

USP Isopropyl Alcohol and Water for Injection

VAI®'s DECON-AHOL® Products are formulated with USP Isopropyl Alcohol (IPA). DECON-AHOL Products are available in 91% and 60% USP IPA with USP Water for Injection (WFI), as well as an aseptically filtered 99% USP IPA.

DECON-AHOL WFI Formula Products have been designed specifically for pharmaceutical, biotechnology, healthcare, and medical device cleaning rotations for use in both aseptic and non-aseptic environments.

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- 60% and 91% formulated with USP Water for Injection
- Components are air washed with 0.2 micron filtered air before assembly
- Completely lot traceable
- 60% and 91% are gamma irradiated sterile; 99% manufactured via aseptic filtration
- Lot sterility tested according to current USP Compendium

Features and Benefits

- Each container is double bagged packaged sterile
- Packaged quadruple bagged in our ABCD Cleanroom Introduction System®
- 60% and 91% delivered with a Certificate of Analysis, Certificate of Sterility, and Certificate of Irradiation
- 99% delivered with a Certificate of Analysis and Certificate of Sterility
- For use on a multitude of surfaces
- Ready-to-use
- Individually labeled with lot number and expiration
- 1 Gallon containers are an excellent choice for GMP operations that require a large volume of solution

Product Uses

- Non-porous, environmental, surfaces
- Gowning rooms, general manufacturing areas, machinery
- Tools, tables, counters, laminar flow benches, carts, shelves
- Glass, plastic, vinyl, stainless steel

Order Number	*Description*	*Qty/Cs*
DECWFI-B-60	DECON-AHOL 60% WFI Formula, 1 Gallon, Sterile	4
DECWFI-B-91	DECON-AHOL 91% WFI Formula, 1 Gallon, Sterile	4
DECB-99	DECON-AHOL 99%, 1 Gallon, Sterile	4

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECWFI-B-60

DECWFI-B-91

DECB-99

STER-AHOL® WFI FORMULA

70% Denatured Ethanol and 30% Water for Injection

DSTER-WFI-TR-04

DSTER-WFI-SP-70

DSTER-WFI-B-70

DSTER-WFI-70-5G

VAI® manufactures an EPA registered denatured ethanol formulated to 70% with a small percentage of methyl alcohol and 30% USP Water for Injection for use as a sanitizer and disinfectant in classified manufacturing and testing environments.

STER-AHOL WFI Formula can be used for the disinfection and decontamination of cleanrooms, controlled areas, hard non-porous environmental surfaces, and many other applications that require the use of a sterile alcohol solution. STER-AHOL WFI Formula has been designed for use in the pharmaceutical biotechnology, medical device, healthcare, and diagnostic manufacturing facilities.

Quality and Manufacturing

- Filled in ISO 5 (Grade A/B, Former Class 100)
- Formulated with USP Water for Injection
- Components are air washed with 0.2 micron filtered air before assembly
- Filtered at 0.2 microns
- Gamma irradiated to a sterility assurance level of 10^{-6}
- Sterility tested according to Current USP Compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is double bagged packaged in easy tear bags
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, Certificate of Sterility, and LAL Test Report
- For use on a multitude of surfaces
- Ready-to-use

Product Uses

- On non-food contact, hard non-porous, inanimate surfaces
- Aseptic filling and gowning rooms
- Manufacturing areas and laboratories
- Machinery, tools, tables, counters, laminar flow benches, floors, walls, carts, shelves
- Glass, plastic, vinyl, chrome, stainless steel

Order Number	*Description*	*Qty/Cs*
DSTER-WFI-SP-70	STER-AHOL WFI Formula, 11 oz Aerosol Spray/Mist, Sterile	24
DSTER-WFI-TR-04	STER-AHOL WFI Formula, 16 oz Attached Trigger, Sterile	12
DSTER-WFI-B-70	STER-AHOL WFI Formula, 1 Gallon, Sterile	4
DSTER-WFI-70-5G	STER-AHOL WFI Formula, 5 Gallon, Sterile	1

Also available in saturated wipes. See page 48.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

WARNING: This product can expose you to chemicals including Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

DECON-CYCLE®

Low pH, Phosphate Free, Phenolic

VAI® manufactures an EPA registered low pH phenolic germicidal detergent that is a phosphate free, dilutable, and has been formulated as a sterile cleanroom formula. DECON-CYCLE's multi-phenolic formula is designed to clean, disinfect and deodorize any washable inanimate, environmental, non-porous surface.

DECON-CYCLE is recommended for use in the pharmaceutical and biotechnology industries, in medical device manufacturing, in hospitals, and in healthcare institutions that are dedicated to controlling the hazards of cross contamination.

Tuberculocidal - Germicidal - Pseudomonacidal - Fungicidal - Virucidal* (kills HIV-1) - Bactericidal
* When used as directed

Quality and Manufacturing**

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits**

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- Sterile pharmaceutical cleanroom formula
- Clean, disinfects, and deodorizes in one easy step
- Multi-phenolic formula with a broad spectrum efficacy
- Effective in the presence of moderate amounts of organic soil, in hard water up to 400 ppm (calculated as $CaCO_3$)
- Mild enough to have no harmful effects on the surface being disinfected when used as directed

Product Uses**

- Hard, non-porous, environmental surfaces
- Aseptic filling and gowning rooms, general manufacturing areas
- Animal premises, hospital surfaces
- Machinery, equipment, tables, counters, floors, walls, stainless steel, porcelain, glass, chrome

Order Number	*Description*	*Qty/Cs*
DCY-01	DECON-CYCLE, 1 Gallon Concentrate, Non-Sterile	4
DCY-02	DECON-CYCLE, 1 Gallon Concentrate, Sterile	4
DCY-03-1Z	DECON-CYCLE, 1 oz Concentrate, Unit Dose, Sterile	24
DCY-03-2Z	DECON-CYCLE, 2 oz Concentrate, Unit Dose, Sterile	24
DCY-04-1/2Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:256, Sterile	4
DCY-05-1/2Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:256, Non-Sterile	4
DCY-04-1Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:128, Sterile	4
DCY-05-1Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:128, Non-Sterile	4
DCY-06-16Z-01	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:256, Attached Trigger, Sterile	12
DCY-06-16Z-02	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:128, Attached Trigger, Sterile	12
DCY-07-16Z-01	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:256, Attached Trigger, Non-Sterile	12
DCY-07-16Z-02	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:128, Attached Trigger, Non-Sterile	12
DCY-10-200L-CI	DECON-CYCLE, 200 L SimpleMix Drum, Sterile	1

**All points do not apply to Non-Sterile products

DCY-03-2Z

DCY-02

DCY-04-1Z

DCY-06-16Z-01

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

WARNING This product can expose you to chemicals including o-Phenylphenol, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

DECON-PHENE®

Sodium Based Phenolic

DP-03-4Z

DP-02

DP-06-16Z-01

DP-04-1Z

VAI® manufactures an EPA registered tri-phenolic, dilutable, germicidal detergent that has been formulated as sterile cleanroom formula. DECON-PHENE has been designed to clean, disinfect, and deodorize any washable inanimate, environmental, non-porous surface.

DECON-PHENE is process to comply with the standards required by the pharmaceutical, biotechnology, medical device, and healthcare industries. This phenolic formulated has been developed for use in cleaning rotation cycles where hard surface disinfectants are required to maintain a clean environment.

Tuberculocidal – Germicidal – Pseudomonacidal – Fungicidal – Virucidal* (Kills HIV-1) – Bactericidal

*when used as directed

Quality and Manufacturing**

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits**

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- Sterile pharmaceutical cleanroom formula
- Tri-phenolic and phosphate formula with a broad spectrum efficacy against Gram negative and Gram positive bacteria
- Clean, disinfects, and deodorizes in one easy step
- Effective in the presence of moderate amounts of organic soil
- Mild enough to have no harmful effects on the surface being disinfected when used as directed
- Can be used on numerous surfaces that are not harmed by water based cleaners

Product Uses**

- Inanimate surfaces in aseptic filling and gowning rooms, general manufacturing areas
- Machinery, tables, counters, laminar flow benches, floors, walls
- Stainless steel, chrome plated steel, brass, copper, aluminum, fiberglass, formica, nylon, lexan, Plexiglass, acrylic, vinyl, glazed porcelain, glass, latex, enamel

Order Number	*Description*	*Qty/Cs*
DP-01	DECON-PHENE, 1 Gallon Concentrate, Non-Sterile	4
DP-02	DECON-PHENE, 1 Gallon Concentrate, Sterile	4
DP-03-2Z	DECON-PHENE, 2 oz Concentrate, Unit Dose, Sterile	24
DP-03-4Z	DECON-PHENE, 4 oz Concentrate, Unit Dose, Sterile	24
DP-04-1Z	DECON-PHENE, 1 Gallon SimpleMix, Sterile	4
DP-04-2Z	DECON-PHENE, 1 Gallon SimpleMix, Sterile	4
DP-05-1Z	DECON-PHENE, 1 Gallon SimpleMix, Non-Sterile	4
DP-05-2Z	DECON-PHENE, 1 Gallon SimpleMix, Non-Sterile	4
DP-06-16Z-01	DECON-PHENE, 16 oz SimpleMix, Attached Trigger, Sterile	12
DP-06-16Z-02	DECON-PHENE, 16 oz SimpleMix, Attached Trigger, Sterile	12
DP-07-16Z-01	DECON-PHENE, 16 oz SimpleMix, Attached Trigger, Non-Sterile	12
DP-07-16Z-02	DECON-PHENE, 16 oz SimpleMix, Attached Trigger, Non-Sterile	12
DP-10-200L-CI	DECON-PHENE, 200L SimpleMix Drum, Sterile	1

**All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

WARNING This product can expose you to chemicals including o-Phenylphenol, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

DECON-QUAT® 100

Phosphate-Free Quaternary Ammonium Solution

VAI® manufactures an EPA registered one-step, phosphate-free, quaternary ammonium solution that is a proven cleaner, sanitizer, mildewstat and virucide. DECON-QUAT 100 is a broad-spectrum hard surface disinfectant in presence of organic soil (5% blood serum) when used as directed.

DECON-QUAT 100 is recommended for the use in the pharmaceutical, lab animal, biotechnology, medical device, and healthcare industries. DECON-QUAT 100 has been designed to provide effective cleaning, deodorizing, and disinfection in areas where housekeeping and controlling the hazards of cross-contamination in treated surfaces is of prime importance.

Cleaner – Disinfectant – Sanitizer – Deodorizer – Fungicide – Mildewstat – Virucide*
*when used as directed

Quality and Manufacturing**

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits**

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- One-step disinfectant that is effective against a broad spectrum of bacteria, is virucidal*, and inhibits the growth of mold and mildew and their odors when used as directed
- Meets OSHA Bloodborne Pathogen Standard for HIV, HBV, and HCV
- Effective non-food contact sanitizer in the presence of 5% serum contamination on hard, non-porous, non-food contact surfaces at 200 ppm active
- Non-abrasive formula will not harm or scratch surfaces, is non-staining, and non-dulling
- Contains no fragrances or phosphates and will not leave grit or soap scum

Product Uses**

- General hard, non-porous surfaces
- Floors, finished floors, walls, ceilings
- Glass, aluminum, brass, copper, laminated surfaces, metal, plated steel, stainless steel, plastic (such as polycarbonate, polyvinylchloride, polystyrene or polypropylene), chrome, plexiglass, enameled surfaces, formica, and vinyl

Order Number	*Description*	*Qty/Cs*
DQ100-01	DECON-QUAT 100, 1 Gallon Concentrate, Non-Sterile	4
DQ100-02	DECON-QUAT 100, 1 Gallon Concentrate, Sterile	4
DQ100-03-2Z	DECON-QUAT 100, 2 oz Concentrate, Unit Dose, Sterile	24
DQ100-03-8Z	DECON-QUAT 100, 8 oz Concentrate, Unit Dose, Sterile	24
DQ100-04-2Z	DECON-QUAT 100, 1 Gallon SimpleMix, Sterile	4
DQ100-05-2Z	DECON-QUAT 100, 1 Gallon SimpleMix, Non-Sterile	4
DQ100-06-16Z-01	DECON-QUAT 100, 16 oz SimpleMix, Attached Trigger, Sterile	12
DQ100-07-16Z-01	DECON-QUAT 100, 16 oz SimpleMix, Attached Trigger, Non-Sterile	12
DQ100-10-200L-2XI	DECON-QUAT 100, 200 L SimpleMix Drum, Sterile	1

**All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DQ100-03-8Z

DQ100-02

DQ100-04-2Z

DQ100-06-16Z-01

DECON-QUAT® 200C

5th Generation Quaternary Ammonium Solution

DQ200C-03-8Z

DQ200C-02

DQ200C-05-2Z

DQ200C-06-16Z-01

VAI® manufactures an EPA registered, one-step, fifth generation quaternary ammonium solution. When used as directed, DECON-QUAT 200C is highly effective against a broad spectrum of pathogenic microorganisms including bacteria, anti-biotic resistant bacteria, viruses*, fungi, mold, and mildew. DECON-QUAT 200C is effective in hard water up to 400 ppm hardness (Calculated as $CaCO_3$) in the presence of 5% serum contamination.

DECON-QUAT 200C is recommended for use in pharmaceutical, biotechnology, and medical device manufacturing facilities, in healthcare facilities, and hospitals. DECON-QUAT 200C is a neutral pH and phosphate-free formulation designed to provide effective cleaning, deodorizing, and disinfection in areas where housekeeping is of prime importance in controlling the hazard of cross-contamination on treated surfaces.

Cleaner – Disinfectant – Non-Food Contact Sanitizer – Deodorizer – Fungicide – Mildewstat – Virucide*
*when used a directed

Quality and Manufacturing**

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits**

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- Proven one-step disinfectant, cleaner, sanitizer, fungicide, mildewstat, and virucide when used as directed
- Meets OSHA Bloodborne Pathogen Standard for HIV, HBV, and HCV
- One-step hospital-use germicidal disinfectant
- No-rinse disinfectant cleaner that disinfects, cleans, and deodorizes in one labor-saving step
- Neutral pH, chemically balanced, contains no fragrances, and contains no phosphorous
- Will not harm most surfaces and will not leave grit or soap scum

Product Uses**

- Hard, inanimate surfaces in filling and gowning rooms
- General manufacturing areas
- Machinery tables, counter tops, laminar flow benches, floors, and walls
- Stainless steel, porcelain, glass, and chrome

Order Number	*Description*	*Qty/Cs*
DQ200C-01	DECON-QUAT 200C, 1 Gallon Concentrate, Non-Sterile	4
DQ200C-02	DECON-QUAT 200C, 1 Gallon Concentrate, Sterile	4
DQ200C-03-2Z	DECON-QUAT 200C, 2 oz Concentrate, Unit Dose, Sterile	24
DQ200C-03-8Z	DECON-QUAT 200C, 8 oz Concentrate, Unit Dose, Sterile	24
DQ200C-04-2Z	DECON-QUAT 200C, 1 Gallon SimpleMix, Sterile	4
DQ200C-05-2Z	DECON-QUAT 200C, 1 Gallon SimpleMix, Non-Sterile	4
DQ200C-06-16Z-01	DECON-QUAT 200C, 16 oz SimpleMix, Attached Trigger, Sterile	12
DQ200C-07-16Z-01	DECON-QUAT 200C, 16 oz SimpleMix, Attached Trigger, Non-Sterile	12

**All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

HYPO-CHLOR®

Sodium Hypochlorite Solution

VAI® manufactures three EPA registered sodium hypochlorite solutions, formulated with WFI and concentrated at 0.25%, 0.52%, or 5.25%, that are used to disinfect and sanitize cleanrooms and controlled areas. HYPO-CHLOR products are effective, one-step, ready-to-use, sanitizers, disinfectant, and fungicides.

HYPO-CHLOR Products are recommended for use in healthcare institutions, biopharmaceutical, medical device, and diagnostic manufacturing facilities. HYPO-CHLOR Products have been developed for use in cleaning rotation cycles on most washable, non-porous, hard, inanimate environmental surfaces for maintaining a clean environment.

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Aseptically filled into sterile components via gamma irradiation
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life
- Formulated with USP Water for Injection
- 5.25% assayed to current USP compendium

Features and Benefits*

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis and Certificate of Sterility
- Specifically formulated as a sterile cleanroom pharmaceutical formula
- Available in three ready-to-use solutions: 0.25%, 0.52%, and 5.25%
- Designed for all washable environmental surfaces
- 16 oz containers come with sterile spray attachment

Product Uses*

- Cleanroom and controlled areas
- Aseptic filling and gowning rooms, general manufacturing areas, laboratories
- Machinery, tools, tables, counters, laminar flow benches, floors, walls, carts, shelves
- Plastic, glass, vinyl, glazed porcelain, laminates, glazed tile, stainless steel

Order Number	*Description*	*Qty/Cs*
SHC-01-5.25	HYPO-CHLOR 5.25%, 1 Gallon, Non-Sterile	4
SHC-01-0.52	HYPO-CHLOR 0.52%, 1 Gallon, Non-Sterile	4
SHC-01-0.25	HYPO-CHLOR 0.25%, 1 Gallon, Non-Sterile	4
SHC-02-5.25	HYPO-CHLOR 5.25%, 1 Gallon, Sterile	4
SHC-02-0.52	HYPO-CHLOR 0.52%, 1 Gallon, Sterile	4
SHC-02-0.25	HYPO-CHLOR 0.25%, 1 Gallon, Sterile	4
SHC-13Z-5.25	HYPO-CHLOR 5.25%, 13 oz, Unit Dose, Sterile	12
SHC-16Z-5.25	HYPO-CHLOR 5.25%, 16 oz, Unattached Trigger, Sterile	12
SHC-16Z-0.52	HYPO-CHLOR 0.52%, 16 oz, Unattached Trigger, Sterile	12
SHC-16Z-0.25	HYPO-CHLOR 0.25%, 16 oz, Unattached Trigger, Sterile	12
SHC-10-200L-0.25	HYPO-CHLOR 0.25%, 200L Drum, Sterile	1

*All points do not apply to Non-Sterile products
Also available in saturated wipes. See page 43.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

SHC-16Z-0.25

SHC-16Z-0.52

SHC-02-5.25

SHC-13Z-5.25

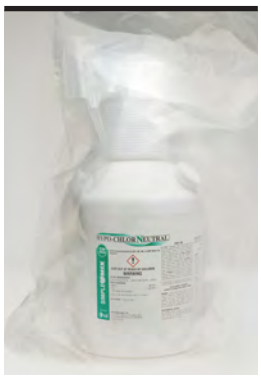
HYPO-CHLOR® Neutral

Neutralized Sodium Hypochlorite


SHC-NPH-0.25-16Z


SHC-NPH-0.25-02


SHC-NPH-0.52-16Z


SHC-NPH-0.52-02

VAI® manufactures two effective, neutralized sodium hypochlorite solutions formulated with Water for Injection (WFI) at 0.25% or 0.52% concentrations. This neutralized solution can be used as an improved and enhanced sodium hypochlorite cleaner on numerous cleanroom surfaces with reduced consequences of corrosion, pitting, and rusting.

HYPO-CHLOR Neutral Products have been designed for all pharmaceutical, biopharmaceutical, biotechnology, healthcare, medical device, and diagnostic manufacturing cleaning rotations that demand a neutral pH sodium hypochlorite solution adequate for maintaining a clean and critical environment.

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Aseptically filled into sterile components via gamma irradiation
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Formulated with USP Water for Injection

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- Available in two concentrations: 0.25% and 0.52%
- Effective for up to 24 hours post activation
- Enhanced cleaning applications over a standard sodium hypochlorite solution
- Increased cleaning surface compatibility
- Neutralized sodium hypochlorite will significantly reduce corroding, rusting, and pitting of cleanroom surfaces
- Designed for all washable non-porous environmental surfaces

Product Uses

- Cleanroom and controlled areas
- Non-porous, inanimate surfaces
- Aseptic filling and gowning rooms, general manufacturing areas, laboratories
- Machinery, tools, tables, counters, laminar flow benches, floors, walls, carts, shelves
- Plastic, glass, vinyl, glazed porcelain, laminates, glazes tiles, stainless steel

Order Number	*Description*	*Qty/Cs*
SHC-NPH-0.25-16Z	HYPO-CHLOR® Neutral 0.25%, 16 oz SimpleMix, Attached Activator, Attached Trigger, Sterile	12
SHC-NPH-0.25-02	HYPO-CHLOR® Neutral 0.25%, 1 Gallon SimpleMix, Attached Activator, Sterile	4
SHC-NPH-0.52-16Z	HYPO-CHLOR® Neutral 0.52%, 16 oz SimpleMix, Attached Activator, Attached Trigger, Sterile	12
SHC-NPH-0.52-02	HYPO-CHLOR® Neutral 0.52%, 1 Gallon SimpleMix, Attached Activator, Sterile	4

Other Technical Data Available Upon Request

Product Technical Data Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-PEROX®

Hydrogen Peroxide Solution

VAI® manufactures two hydrogen peroxide solutions, STERI-PEROX® 3% and 6%. As an effective one-step, ready-to-use, oxidizing cleaner, STERI-PEROX, penetrates to the surface and is tough on a variety of soils. STERI-PEROX reduces exposure concerns for VOC's in cleanroom operations, leaves a low remaining residue, and is designed for most washable, non-porous, hard, inanimate environmental surfaces.

STERI-PEROX Products are processed to comply with the standards required by the pharmaceutical, biotechnology, healthcare, and medical device industries. STERI-PEROX is recommended for use in cleanroom cleaning rotations that demand the use of a sterile hydrogen peroxide solution adequate for maintaining a clean and critical environment.

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Aseptically filled into sterile components via gamma irradiation
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life
- Formulated with USP Water for Injection

Features and Benefits*

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis and Certificate of Sterility
- Specifically formulated as a sterile cleanroom pharmaceutical formula
- Compatible with most surfaces
- Available in two ready-to-use solutions: 3% and 6% concentrations
- 16 oz and 32 oz containers come with sterile spray attachments
- Low remaining residue

Product Uses*

- Most environmental, hard, non-porous surfaces
- Manufacturing equipment, packaging equipment, filling equipment
- Glass, plexiglass, stainless steel
- Walls, ceilings
- Compatible with many types of glove materials

Order Number	*Description*	*Qty/Cs*
SPER-01-3%	STERI-PEROX 3%, 1 Gallon, Non-Sterile	4
SPER-01-6%	STERI-PEROX 6%, 1 Gallon, Non-Sterile	4
SPER-02-3%	STERI-PEROX 3%, 1 Gallon, Sterile	4
SPER-02-6%	STERI-PEROX 6%, 1 Gallon, Sterile	4
SPER-16Z-3%	STERI-PEROX 3%, 16 oz, Unattached Trigger, Sterile	12
SPER-16Z-6%	STERI-PEROX 6%, 16 oz, Unattached Trigger, Sterile	12
SPER-32Z-3%	STERI-PEROX 3%, 32 oz, Unattached Trigger, Sterile	12
SPER-10-200L-3%	STERI-PEROX 3%, 200L Drum, Sterile	1
SPER-10-200L-6%	STERI-PEROX 6%, 200L Drum, Sterile	1

*All points do not apply to Non-Sterile products
Also available in saturated wipes. See page 45.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

SPER-16Z-6%

SPER-01-6%

SPER-32Z-3%

SPER-02-3%

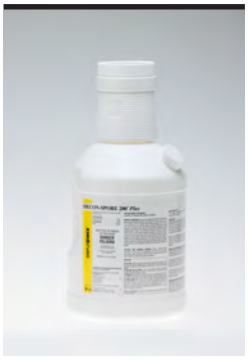
DECON-SPORE 200® PLUS

Peracetic Acid and Hydrogen Peroxide Solution

DS200-03-2ZA

DS200-03-13ZA

DS200-02A



DS200-04-1/2ZA

VAI® manufactures an EPA Registered Peracetic Acid and Hydrogen Peroxide solution that is for use as a broad spectrum sanitizer, disinfectant, virucide, sporicide, sterilant, fungicide, cleaner and deodorizer. DECON-SPORE 200 Plus is a proven "one-step" disinfectant - virucide that cleans as it disinfects in one operation and has been shown to be effective in water up to 400 ppm hardness in the presence of 5% serum contamination.

DECON-SPORE 200 Plus is recommended for use in the pharmaceutical, biotechnology, medical device, hospital, healthcare, and lab animal research industries. DECON-SPORE 200 Plus has been developed for use in cleaning rotation cycles where hard surface disinfectants are essential to maintaining a clean environment.

Sanitizer – Disinfectant – Virucide – Fungicide – Sporicide – Sterilant – Deodorizer – Cleaner

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100)
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Aseptically filled into sterile components via gamma irradiation
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- Each sterile container is individually bagged in easy tear packaging
- Each sterile container of SimpleMix is individually double bagged in easy tear packaging
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis and Certificate of Sterility
- Available in three configurations: concentrate, disinfectant use dilution, and sporicidal use dilution
- Available in the convenient, one-step, ready-to-use, SimpleMix® System
- Concentrated broad-spectrum disinfectant-virucide
- Disinfects as it at cleans in one operation
- Designed for the sterilization of manufacturing, filling, and packaging equipment in aseptic processes
- Proven one-step disinfectant-cleaner for use in healthcare settings and quickly removes dirt, grime, blood, and other organic matter commonly found in healthcare facilities
- Effective disinfectant in water up to 500ppm hardness in the presence of 5% serum contamination and dried soap film residue

Product Uses*

- Floors, walls, tables, chairs, countertops, sinks, shelves, racks, carts
- Filling equipment, packaging equipment
- Tiles, linoleum, vinyl, glazes porcelain, plastic, stainless steel, glass

Order Number	*Description*	*Qty/Cs*
DS200-01A	DECON-SPORE 200 Plus, 1 Gallon Concentrate, Non-Sterile	4
DS200-02A	DECON-SPORE 200 Plus, 1 Gallon Concentrate, Sterile	4
DS200-03-1ZA	DECON-SPORE 200 Plus, 0.8 oz Concentrate, Unit Dose, Sterile (sporicidal w/16 oz of water)	24
DS200-03-2ZA	DECON-SPORE 200 Plus, 2 oz Concentrate, Unit Dose, Sterile (disinfectant w/4 gal of water)	24
DS200-03-13ZA	DECON-SPORE 200 Plus, 13 oz Concentrate, Unit Dose, Sterile (sporicidal w/2 gal of water)	12
DS200-04-1/2ZA	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Disinfectant Dose, Sterile	4
DS200-04A	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Sporicidal Dose, Sterile	4
DS200-05-1/2ZA	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Disinfectant Dose, Non-Sterile	4
DS200-05A	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Sporicidal Dose, Non-Sterile	4
DS200-06-16Z-01	DECON-SPORE 200 Plus, 16 oz SimpleMix, Sporicidal Dose, Attached Trigger, Sterile	12
DS200-06-16Z-02	DECON-SPORE 200 Plus, 16 oz SimpleMix, Disinfectant Dose, Attached Trigger, Sterile	12
DS200-07-16Z-01	DECON-SPORE 200 Plus, 16 oz SimpleMix, Sporicidal Dose, Attached Trigger, Non-Sterile	12
DS200-07-16Z-02	DECON-SPORE 200 Plus, 16 oz SimpleMix, Disinfectant Dose, Attached Trigger, Non-Sterile	12
DS200-10-200L-SD-CI	DECON-SPORE 200 Plus, 200L SimpleMix Drum, Sporicidal Dose, Sterile	1
DS200-11-200L-SD-CI	DECON-SPORE 200 Plus, 200L SimpleMix Drum, Disinfectant Dose, Sterile	1

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECON-CLEAN®

Residue Remover and Cleaner

VAI® manufactures an effective one-step residue remover and cleaner, DECON-CLEAN. Using DECON-CLEAN, one can assure that noticeable and unnoticeable residues are removed, thus returning the surface to its original form. Residues left behind from disinfectants, sanitizers, and sporicidies, including sodium hypochlorite can be easily removed using DECON-CLEAN. Returning the surface to its original form assures that future decontamination will be able to penetrate to the surface.

DECON-CLEAN is designed for and processed to meet the standards required by pharmaceutical, biotechnology, healthcare, and lab animal research operations that demand a cleaning agent to remove residues left behind from disinfecting agents. Due to DECON-CLEAN's formulation it is an excellent cleaner designed for all washable, non-porous environmental surfaces.

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Available in our convenient, one-step, ready-to-use, SimpleMix System
- Removes residues from sanitizers, disinfectants, and sporicides
- Excellent cleaning characteristics

Product Uses*

- All washable, non-porous, environmental surfaces
- Aseptic filling suites, controlled corridors
- Aseptic connections, process lines
- Walls, floors, ceilings, counter tops
- Stainless steel

Order Number	*Description*	*Qty/Cs*
DC-01	DECON-CLEAN, 1 Gallon Concentrate, Non-Sterile	4
DC-02	DECON-CLEAN, 1 Gallon Concentrate, Sterile	4
DC-03-4Z	DECON-CLEAN, 4 oz Concentrate, Unit Dose, Sterile	24
DCWFI-SP-11Z	DECON-CLEAN, 11 oz Aerosol Spray/Mist, Sterile	24
DC-04-1Z	DECON-CLEAN, 1 Gallon SimpleMix, Sterile	4
DC-05-1Z	DECON-CLEAN, 1 Gallon SimpleMix, Non-Sterile	4
DC-06-16Z-01	DECON-CLEAN, 16 oz Simple Mix, Attached Trigger, Sterile	12
DC-07-16Z-01	DECON-CLEAN, 16 oz Simple Mix, Attached Trigger, Non- Sterile	12
DC-10-200L-CI	DECON-CLEAN, 200L Simple Mix Drum, Sterile	1

*All points do not apply to Non-Sterile products
Also available in saturated wipes. See page 44.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS


DC-03-4Z


DC-02


DC-04-1Z


DC-06-16Z-01

STEEL-BRIGHT®

Stainless Steel Polish and Cleaner

SB-02

VAI® manufactures a sterile stainless steel polish and cleaner to remove residues, spots, and stains. STEEL-BRIGHT® has been developed for use in cleaning rotation cycles that demand a sterile stainless steel polish and cleaner for use in aseptic manufacturing areas and cleanroom operations.

STEEL-BRIGHT is processed to comply with the standards required by pharmaceutical, biotechnology, medical device, lab animal, and healthcare industries. With sterile STEEL-BRIGHT, stainless steel can be restored to a residue free finish that will not rainbow or accumulate to a heavy build up. Surfaces will remain cleaner longer because there is no residue film to attract the soil. The gloss of the stainless steel is renewed and retained with wiping and buffing with no lasting powdery residue

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Conformance, Certificate of Irradiation, and Certificate of Sterility
- Available in an 8 oz aerosol that will not aspirate the room's air
- Specifically formulated as a sterile cleanroom formula
- Professional strength stainless steel cleaner
- Brightens and polishes without leaving a powdery residue
- Pleasantly lemon scented
- Contains no acids or abrasives

Product Uses

- Remove chemical residues and spotting and staining caused by water and oils on stainless steel
- Brighten and polish stainless steel
- Can also be used on chrome, brass, aluminum, and copper

Order Number	*Description*	*Qty/Cs*
SB-02	STEEL-BRIGHT, 8 oz Aerosol Spray/Mist, Sterile	24

*Also available in saturated wipes. See page 50.

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-SILICON®

Silicone Lubricant And Releasing Spray

VAI® manufactures a sterile silicon lubricant and releasing spray, STERI-SILICON. STERI-SILICON has been developed for use as a sterile silicon lubricant in aseptic manufacturing areas and cleanrooms to speed up operations in heat sealing, packaging, and general processing.

STERI-SILICON is processed to comply with the standards required by pharmaceutical, biotechnology, medical device, and healthcare industries. STERI-SILICON is an excellent choice for machinery lubrication which is essential for trouble free equipment operations during manufacturing of products, for stopping squeaks, to release sticking objects, and for protecting and prolonging machinery life.

SSIL-02

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Conformance, Certificate of Irradiation, and Certificate of Sterility
- Available in an 8 oz aerosol that will not aspirate the room's air
- Delivered with one unattached nozzle extension per bottle for use in hard to reach areas or when lubricating intricate machinery and equipment parts
- Specifically formulated as a sterile cleanroom formula
- Allows for trouble free processing during manufacturing
- Colorless, has excellent thermal stability, and is inert

Product Uses

- Spray on parts to stop squeaks
- Lubricate moving parts, machinery, and equipment for trouble free operations
- Speed up heat sealing, packaging, and processing
- Release sticking objects
- Use on chains, rollers, delivery chutes, hinges, latches, belts, rubber moldings, and drawers

Order Number	*Description*	*Qty/Cs*
SSIL-02	STERI-SILICON, 8 oz Aerosol Spray/Mist, Sterile	24

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-OIL® 200

Sterile Mineral Oil Lubricant

SO200-A1Z

VAI® manufactures a sterile, USP grade, penetrating mineral oil lubricant, STERI-OIL. STERI-OIL 200 has been developed for use as a sterile lubricant in aseptic manufacturing areas and cleanrooms to reduce items from sticking, penetrate and lubricate mechanisms, and for moisture displacement.

STERI-OIL 200 is processed to comply with the standards required by pharmaceutical, biotechnology, medical device, and healthcare industries. STERI-OIL 200's heavy consistency provides lubrication, prevents metal-to-metal contact, can withstand high friction without displacement, and reduces metal fatigue. STERI-OIL 200 is ideal for machinery lubrication, which is an essential step for trouble free equipment operation during manufacturing.

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Specifically formulated as a sterile cleanroom formula
- Available in an 1 oz bottle with a dropper tip for precise application
- Bottle design prevents over use and over application
- Heavy consistency ensures excellent lubrication and penetration
- Allows for trouble free processing during manufacturing
- 100% mineral oil

Product Uses

- Lubricate moving parts, machinery, and equipment for trouble free operations
- Penetrate mechanisms
- Prevent metal-to-metal contact and reduce metal fatigue
- Moisture displacement
- Reduce items from sticking
- On intricate machinery parts or where precise lubrication application is required

Order Number	*Description*	*Qty/Cs*
SO200-A1Z	STERI-OIL 200, 1 oz Dropper, Sterile	250

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-BUFFER® 90 & 99

Sterile Phosphate Buffer pH 7.2 ± 0.2

VAI® manufactures two sterile, disposable, sodium phosphate buffer solutions, STERI-BUFFER 90 & 99, that are assayed to current USP Standards (Bufferfield's Buffer) and buffered to a pH of 7.2 ± 0.2. STERI-BUFFER Products are available in either a 90 mL or 99 mL fill level.

STERI-BUFFER Products are processed to comply with the standards required by pharmaceutical, biotechnology, and medical device industries. STERI-BUFFER Products have been developed for use as a buffer solution and diluent in lab testing such a bioburden testing, pharmaceutical microbial limits testing, and AET testing and as a rinsing agent.

SB100-99

SB100-90

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10-6 SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is bagged two per bag in easy tear bags and packaged in two case liners for easy transport to the core
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Sterility, and Certificate of Irradiation
- Available in two fill levels, 90 mL or 99 mL to fit your operation's needs
- Assayed to current USP Standards (Butterfield's Buffer)
- Buffered to a pH of 7.2 ± 0.2
- Each bottle has a "no tamper strip" that breaks once the bottle has been opened
- Disposable
- Odorless

Product Uses

- Rinsing agent
- Buffer solution in laboratory testing including bioburden testing, pharmaceutical microbial limits testing, and AET testing

Order Number	*Description*	*Qty/Cs*
SB100-90	STERI-BUFFER, Phosphate Buffer Solution, 90 mL, Sterile	72
SB100-99	STERI-BUFFER, Phosphate Buffer Solution, 99 mL, Sterile	72

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECON-GLASS®

Glass And Plexiglass Residue Remover and Cleaner

DG-03-16Z

VAI® manufactures an effective, one-step, ready-to-use, residue remover, and glass and plexiglass cleaner that is formulated with USP Water for Injection. DECON-GLASS removes noticeable and unnoticeable residues, smudges, oils, and dirt build up, thus returning the surface to its original form. Return of the surface to the original form assures that future decontamination operations will address surfaces and not the existing residues.

DECON-GLASS is designed for pharmaceutical and biotechnology cleaning cycles that demand a sterile glass and plexiglass cleaner capable of removing residues from disinfecting agents. DECON-GLASS is an excellent cleaner designed for all washable, non-porous environmental surfaces.

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Specifically formulated as a glass cleaner and degreaser
- Designed for all washable environmental surfaces
- Streak free and incorporates detergency characteristics
- Low remaining residue

Product Uses

- Environmental, hard, non-porous surfaces
- Glass, plexiglass
- Applications that require the use of a streak free sterile glass cleaner
- Use where there is a build-up of previous disinfectants, oil, or residue as a residue remover

Order Number	*Description*	*Qty/Cs*
DG-03-16Z	DECON-GLASS, 16 oz, Attached Trigger, Sterile	12

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-WATER®

USP Purified Water

VAI® manufactures a USP grade purified water, STERI-WATER that is an excellent choice for chemical formulation, disinfectant dilution, cleaning, lubricating, rinsing, and many other applications within a cleanroom.

STERI-WATER is processed to comply with the standards required by the pharmaceutical, biotechnology, medical device, and healthcare industries. STERI-WATER is ready-to-use and is ideal for operations that do not have USP grade purified water readily available on site when it is required for operational procedures.

STERI-WATER IS NOT FOR HUMAN OR ANIMAL INJECTION, DIAGNOSTIC, OR THERAPEUTIC USE.

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- Specifically formulated as a sterile pharmaceutical cleanroom formula
- For use on a multitude of surfaces
- Lubricates for continuous and effortless manufacturing
- Designed for all washable environmental surfaces
- Meets the needs for USP purified water required in cleanroom operations
- Ideal for operations that do not have USP purified water readily available

Product Uses*

- Chemical formulation, disinfectant dilution
- Lubricating
- Rinsing, cleaning

Order Number	*Description*	*Qty/Cs*
STWA-01	STERI-WATER, 1 Gallon, Non-Sterile	4
STWA-02	STERI-WATER, 1 Gallon, Sterile	4
STWA-16Z	STERI-WATER, 16 oz, Attached Trigger, Sterile	12
STWA-2G	STERI-WATER, 2 Gallons, Sterile	2
STWA-8L	STERI-WATER, 8 Liters, Sterile	2
STWA-5G	STERI-WATER, 5 Gallons, Sterile	1

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STWA-16Z

STWA-02

STWA-2G

STWA-8L

VAI® WFI QUALITY WATER

USP Grade Bulk Water for Injection

VAI-WFI-16Z

VAI-WFI-1G

VAI-WFI-SP-11Z

VAI-WFI-2G

VAI® manufactures a USP grade bulk Water for Injection (WFI), VAI WFI Quality Water, that is ready-to-use and can be used throughout any facility for chemical formulation, disinfectant dilution, cleaning, rinsing, and lubrication. VAI's WFI Quality Water is produced from a 6 effect distilled water system that is validated, routinely monitored, and passes all USP monograph requirements for "Water for Injection".

VAI WFI Quality Water is processed to comply with the standards required by the pharmaceutical, biotechnology, medical device, and healthcare industries. VAI WFI Quality Water is an innovative solution for GMP facilities that demand the use of a sterile WFI quality water in their daily operations but do not have it readily available on site.

VAI WFI QUALITY WATER IS NOT FOR HUMAN OR ANIMAL INJECTION, DIAGNOSTIC, OR THERAPEUTIC USE.

Quality and Manufacturing

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered at 0.2 microns
- Components are air washed with 0.2 micron filtered air before assembly
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Lot tested for endotoxins
- Completely traceable from start to finish
- Completely validated for sterility and shelf life
- Produced from a validated 6 effect distilled water system
- Passes all USP monograph requirements for "Water for Injection"

Features and Benefits

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- For use on a multitude of surfaces
- Lubricates for continuous and effortless manufacturing
- Meets the needs for USP grade WFI when required in cleanroom operations
- Ideal for operations that do not have USP grade WFI readily available

Product Uses

- Chemical formulation, disinfectant dilution
- Lubricating
- Rinsing, cleaning

Order Number	*Description*	*Qty/Cs*
VAI-WFI-16Z	VAI WFI Quality Water, 16 oz, Attached Trigger, Sterile	12
VAI-WFI-SP-11Z	VAI WFI Quality Water, 11 oz, Aerosol Spray/Mist, Unattached Nozzle Extension, Sterile	24
VAI-WFI-1G	VAI WFI Quality Water, 1 Gallon, Sterile	4
VAI-WFI-2G	VAI WFI Quality Water, 2 Gallon, Sterile	2
VAI-WFI-200L	VAI WFI Quality Water, 200 L Drum, Single Bagged, Sterile	1
VAI-WFI-200L-2B	VAI WFI Quality Water, 200 L Drum, Double Bagged, Sterile	1

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECON-HAND®

FDA Registered Ethanol Based Hand Sanitizer

VAI® manufactures an ethanol based, gelled, instant hand sanitizer, DECON-HAND. DECON-HAND complies with the requirement for transport into classified areas within the cleanroom operation, therefore, making it an ideal product for hand sanitizing before glove donning in gowning rooms. DECON-HAND is an FDA registered product.

DECON-HAND is processed to comply with the standards required by the pharmaceutical, biotechnology, medical device, and healthcare industries. DECON-HAND is available in two sizes, including a 32 oz bottle for the ASEPTI-CLEANSE, a hands free dispensing system.

Quality and Manufacturing*

- Filled in an ISO 5 (Grade A/B, Former Class 100) operation
- Filtered
- Gamma irradiated at a 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life
- Manufactured in accordance with 21 CFR Part 211 Good Manufacturing Practices for Drugs

Features and Benefits*

- Each sterile container is double bagged in easy tear packaging
- Quadruple bagged in the ABCD Cleanroom Introduction System®
- Individually labeled with lot number and expiration
- Delivered with lot specific Certificate of Analysis, Certificate of Irradiation, and Certificate of Sterility
- FDA Registered
- 32 oz container size compatible with our hands free dispensing system, ASEPTI-CLEANSE
- 16 oz bottles delivered with an optional attachable pump
- 16 oz can be mounted directly to the wall using the DH-100
- Ready-to-use

Product Uses

- As an instant hand sanitizer
- Throughout the entire facility
- Hand sanitizing before glove donning

Order Number	*Description*	*Qty/Cs*
DH-04	DECON-HAND, 16 oz, Attachable Pump, Non-Sterile	12
DH-06	DECON-HAND, 16 oz, Attachable Pump, Sterile	12
DH-09	DECON-HAND, 32 oz, Bottle for ASEPTI-CLEANSE®, Non-Sterile	12
DH-10	DECON-HAND, 32 oz, Bottle for ASEPTI-CLEANSE, Sterile	12
DH-100	DECON-HAND, Wall Dispenser, For 16 oz Bottles, 316 L Stainless Steel	1

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DH-06

DH-10

DH-100

ASEPTI-CLEANSE®

Hands-Free Dispensing System for DECON-AHOL WFI® FORMULA and DECON-HAND®

DEC-301

DH-10

DEC-301STANDSS

VAI® developed the ASEPTI-CLEANSE to meet the requirements of cGMP cleanroom operations. The dispensing system is the most advanced infrared sensor dispensing system available in the pharmaceutical and biotechnology industries. It can be set to dispense approximately 1, 2, or 3 mL of solution. It dispenses a pre-measured dose to the hand without user contact.

The ASEPTI-CLEANSE can be mounted directly to glass or walls which makes it an excellent choice for gowning rooms and aseptic manufacturing areas.

Simply place your hand underneath the ASEPTI-CLEANSE to deliver a pre-measured dose to the hand with no contact between the user and the ASEPTI-CLEANSE.

Features and Benefits

- Compatible with 32 oz bottles of DECON-AHOL WFI Formula or DECON-HAND
- Photo-eye operated
- Equipped with dual power supply – 4 D Cell batteries (can last over 1 year) and Connector for Aux. DC power in
- Mountable directly on glass or walls
- Water resistant
- Americans with Disabilities Act (ADA) compliant
- UL Medical Device listed
- Able to be maintained without tools
- Compactly sized 6.75 × 4 × 11 in (L × W × H)

Order Number	*Description*	*Qty/Cs*
DEC-301	ASEPTI-CLEANSE Dispenser, for 32 oz Bottles	1
DECWFI-BOT-01	DECON-AHOL WFI Formula, 32 oz Bottle, Non-Sterile	12
DECWFI-BOT-02	DECON-AHOL WFI Formula, 32 oz Bottle, Sterile	12
DH-09	DECON-HAND, 32 oz Bottle, Non-Sterile	12
DH-10	DECON-HAND, 32 oz Bottle, Sterile	12
DEC-301TRAY	ASEPTI-CLEANSE Plastic Drip Tray, Additional	1
DEC-301STANDSS	ASEPTI-CLEANSE Stainless Steel Stand	1

SIMPLEMIX® Systems

For The Exact Formulation Of Disinfectants and Sporicides*

- The patented system eliminates concerns by regulatory agencies for proper mixing and sterility of the solution
- No filtering solutions to aseptic manufacturing areas
- No need to assure sterile USP Water for Injection is present in the aseptic area
- No concern for mixing and handling concentrate phenolics, quaternary ammonium, peracetic acid and H_20_2, or cleaners with sterile water in aseptic manufacturing operations
- The system assures the appropriate dilution is made each time in a closed sterile system
- Dilutions are made safely as concentrates are never handled
- Chemical agents and the WFI Quality Water are filtered at 0.2 microns and manufactured in ISO 5 (Grade A/B, former Class 100)
- The contents of the double bagged packages are sterilized through a validated gamma irradiation cycle that assure a 10^{-6} Sterility Assurance Level or via aseptic fill
- All product lots are sterility tested per current USP compendium
- Available in 3 sizes: 16 ounce trigger sprayer, 1 gallon, and 200 Liter
- Easy to use, just push the plunger completely down, swirl to allow the concentrate to mix with the water, and the solution is then ready to use (16 oz and gallon sizes only)
- Available in sterile and non-sterile versions of the following VAI products: DECON-CLEAN®, DECON-CYCLE®, DECON-PHENE®, DECON-QUAT® 100, DECON-QUAT® 200C, DECON-SPORE 200® Plus

1 GALLON STERILE

Order Number	*Description*	*Qty/Cs*
DCY-04-1/2Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:256	4
DCY-04-1Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:128	4
DP-04-1Z	DECON-PHENE, 1 Gallon SimpleMix	4
DP-04-2Z	DECON-PHENE, 1 Gallon Simple Mix	4
DQ100-04-2Z	DECON-QUAT 100, 1 Gallon SimpleMix	4
DQ200C-04-2Z	DECON-QUAT 200C, 1 Gallon Simple Mix	4
DS200-04-1/2ZA	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Disinfectant Dose	4
DS200-04A	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Sporicidal Dose	4
DC-04-1Z	DECON-CLEAN , 1 Gallon SimpleMix	4

1 GALLON NON-STERILE*

DCY-05-1/2Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:256	4
DCY-05-1Z	DECON-CYCLE, 1 Gallon SimpleMix, Use Dilution 1:128	4
DP-05-1Z	DECON-PHENE, 1 Gallon SimpleMix	4
DP-05-2Z	DECON-PHENE, 1 Gallon SimpleMix	4
DQ100-05-2Z	DECON-QUAT 100, 1 Gallon SimpleMix	4
DQ200C-05-2Z	DECON-QUAT 200C, 1 Gallon Simple Mix	4
DS200-05-1/2ZA	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Disinfectant Dose	4
DS200-05A	DECON-SPORE 200 Plus, 1 Gallon SimpleMix, Sporicidal Dose	4
DC-05-1Z	DECON-CLEAN , 1 Gallon SimpleMix	4

16 OUNCE STERILE

DCY-06-16Z-01	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:256	12
DCY-06-16Z-02	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:128	12
DP-06-16Z-01	DECON-PHENE, 16 oz SimpleMix	12
DP-06-16Z-02	DECON-PHENE, 16 oz SimpleMix	12
DQ100-06-16Z-01	DECON-QUAT 100, 16 oz SimpleMix	12
DQ200C-06-16Z-01	DECON-QUAT 200C, 16 oz SimpleMix	12
DS200-06-16Z-01	DECON-SPORE 200 Plus,16 oz SimpleMix, Sporicidal Dose	12
DS200-06-16Z-02	DECON-SPORE 200 Plus,16 oz SimpleMix, Disinfectant Dose	12
DC-06-16Z-01	DECON-CLEAN, 16 oz SimpleMix	12

16 OUNCE NON-STERILE*

DCY-07-16Z-01	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:256	12
DCY-07-16Z-02	DECON-CYCLE, 16 oz SimpleMix, Use Dilution 1:128	12
DP-07-16Z-01	DECON-PHENE, 16 oz SimpleMix	12
DP-07-16Z-02	DECON-PHENE, 16 oz SimpleMix	12
DQ100-07-16Z-01	DECON-QUAT 100, 16 oz SimpleMix	12
DQ200C-07-16Z-01	DECON-QUAT 200C, 16 oz SimpleMix	12
DS200-07-16Z-01	DECON-SPORE 200 Plus,16 oz SimpleMix, Sporicidal Dose	12
DS200-07-16Z-02	DECON-SPORE 200 Plus,16 oz SimpleMix, Disinfectant Dose	12
DC-07-16Z-01	DECON-CLEAN, 16 oz SimpleMix	12

*All points do not apply to Non-Sterile products

For DECON-PHENE and DECON-CYCLE see pages 15 and 16 for Proposition 65 information.

SIMPLEMIX® 200 L Aseptic Mixing System

For Large Scale Aseptic Manufacturing Environments

The SimpleMix 200 L Aseptic Mixing System provides the ability to mix 200 Liters of disinfectants and sporicides in a closed system for users whom require larger volumes of cleaning agents in their operations. The closed mixing system incorporates three integral parts: a 200 L container of 0.2 micron filtered sterile USP WFI Quality Water (bottom container), a cubicontainer of 0.2 micron filtered sterile concentrate disinfectant, sporicide or cleaner (top container), and a hose and valve system. The 200 L container and the cubicontainer are connected via the sterile hosing and valve system awaiting activation by the end user. The entire 200 L system container, cubicontainer, and hoses are double bag packaged and shipped to the end user.

The method of attaining a sterile product by Veltek Associates, Inc. is dependent upon the concentrate disinfectant/sporicide's stability in varying sterilization methodologies. Two methodologies are employed. Products are either aseptically filled in a ISO 5 (Grade A, former Class 100) area utilizing pre-sterilized components (containers, hoses, and bags) or packaged in a ISO 5 (Grade A, former Class 100) area and subsequently terminally sterilized through a validated 10^{-6} SAL gamma radiation cycle. The SimpleMix 200 L Aseptic Mixing System (WFI water and disinfectant/sporicide) are subsequently tested per lot for sterility via current USP protocol in either manufacturing methodology.

As received by the end user, the entire 200 L container is double bag packed and skidded. The end user can transfer the container via dolly, manual, or automated lifting/transporting device to the ISO 8 (Grade D, former Class 10,000) area where one outer bag is removed. The 200 L container is then transferred to the ISO 7 (Grade C, former Class 10,000) area where the second outer bag is removed prior to entry to the ISO 5 (Grade A, former Class 100). At this point, one hose is inserted into the peristaltic pump. The pump can technically be located in any grade as the SimpleMix 200 L is a closed system of mixing. The container can be mixed in lower classifications and pumped to the desired end use point or mixed within the higher classification areas as all inside the double bag has been rendered sterile. The peristaltic pump mixes the cubicontainer containing the concentrate with the WFI Quality Water for approximately 15 minutes. The solution is contained in a closed sterile disposable system. By opening of the dispense valve the sterile solution can be distributed through the sterile closed system to point of use. Once the end valve is closed, the system ensures its sterile integrity for the next use.

The SimpleMix 200 L Aseptic Mixing System is another innovative solution from Veltek Associates, Inc. to assist large scale manufacturing operations with the difficult task of getting sterile disinfectants and sporicides to the aseptic area.

Order Number	*Description*	*Qty/Cs*
DC-10-200L-CI	DECON-CLEAN®, 200L SimpleMix Drum, Sterile	1
DCY-10-200L-CI	DECON-CYCLE®, 200L SimpleMix Drum, Sterile	1
DQ100-10-200L-2XI	DECON-QUAT® 100, 200L SimpleMix Drum, Sterile	1
DS200-10-200L-SD-CI	DECON-SPORE® 200 Plus, 200L SimpleMix Drum, Sporicidal Dose, Sterile	1
DS200-11-200L-SD-CI	DECON-SPORE 200 Plus, 200L SimpleMix Drum, Disinfectant Dose, Sterile	1
DP-10-200L-CI	DECON-PHENE®, 200L SimpleMix Drum, Sterile	1

For DECON-PHENE and DECON-CYCLE see pages 15 and 16 for Proposition 65 information.

SIMPLEMIX® 200 L Aseptic Mixing System

For Large Scale Aseptic Manufacturing Environments

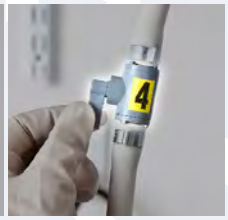
Ready-to-Use Mixing Instructions

Remove drum from double-bag packaging.

Remove cubic container from top of drum. 1) Close all valves. 2) Uncoil hoses.

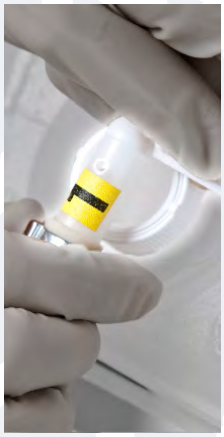
3) Connect center hose to pump between X and Y.

4) Open valve 1, then valve 2, then valve 4.

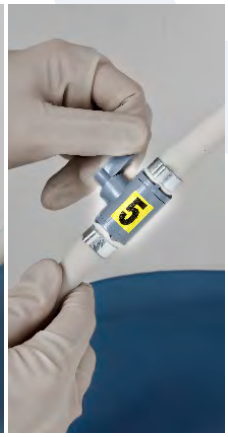


5) START pump to empty cubic container. 6) When cubic container is empty, turn pump OFF.

7) Close valve 1 and valve 2.



8) Open valve 6 and valve 5.



9) Re-start pump and mix 15 minutes. 10) Stop pump.

11) Close valve 4. 12) To dispense- Open valves 3 and 7. Run pump only when dispensing.

13) Follow directions for use on label.

DISPENSERS

For Use With VAI® Products

DEC-50

200-P-48

Several options exist to simplify the dispensing of VAI products.

The DEC-50 is a dispensing system for VAI DECON-AHOL® Aerosol WFI Formula and STER-AHOL® Aerosol WFI Formula. It minimizes cross-contamination from user to user during handling of the alcohol container. The user simply places the back of their hand on the DEC-50 Actuation Arm to dispense solution rather than handling the aerosol container itself.

The DEC-50-FR Foot Pedal is an optional accessory that attaches to the DEC-50 and allows the user to press a Foot Pedal to dispense solution.

VAI offers pump dispensers as well. These dispensers deliver dosed quantities of products which prevents overuse while simplifying dispensing of select VAI products. Gallon-sized individual dispensers are double bagged.

DEC-50 Back-Of-Hand Activated Dispenser

- Designed to minimize cross-contamination in cleanroom operations
- Constructed of 316L stainless steel
- Wall mountable
- Water resistant
- Compactly sized 7 × 6 × 15 in (L × W × H)
- Autoclavable – Easily slide the base and dispenser mechanism from the permanently installed wall plate

Pump Dispensers

- Available for 1 gallon
- Dispense a specific amount
- Individually double bagged
- Gamma irradiated

Wrenches

- Available for 2 gallon and 5 gallon containers
- Make it easier to open the lid (spout) to the container
- Non-sterile

Order Number	*Description*	*Qty/Cs*
DEC-50	Back-of-Hand-Activated Dispenser, For Aerosol Cans, 316L Stainless Steel	1
DEC-50-FR	DEC-50 Foot Pedal Accessory	1
200-P-48	Pump Dispenser, for 1 Gallon Bottle	48
WRENCH-2G	Lid Wrench, for 2 Gallon Containers	1
WRENCH-5G	Lid Wrench, for 5 Gallon Containers	1

VAI® PRODUCT LABEL COLORS

Product Name	Bottle/Can Color	Label Background Color	Bar & User Info Color	Text Color
DECON-AHOL WFI FORMULA 70% AEROSOL	COOL GREY	PRINTED CAN COOL GREY		
DECON-AHOL WFI FORMULA 70% TRIGGER SPRAY, 1 & 5 GALLON	WHITE	COOL GREY		
DECON-AHOL WFI FORMULA 70% SQUEEZE BOTTLE	WHITE SEMI-TRANSPARENT	COOL GREY		
DECON-AHOL WFI FORMULA 70% ASEPTI-CLEANSE BOTTLE	WHITE SEMI-TRANSPARENT	COOL GREY		
DECON-AHOL WFI FORMULA 60%	WHITE	COOL GREY		
DECON-AHOL WFI FORMULA 91%	WHITE	COOL GREY		
DECON-AHOL FORMULA 99%	WHITE	COOL GREY		
STER-AHOL WFI AEROSOL	WHITE	PRINTED CAN WHITE		
STER-AHOL WFI TRIGGER SPRAY, 1 & 5 GALLON	WHITE	WHITE		
DECON-HAND STERILE	WHITE SEMI-TRANSPARENT	PRINTED BOTTLE		
DECON-HAND NON-STERILE	CLEAR	PRINTED BOTTLE		
DECON-HAND ASEPTI-CLEANSE BOTTLE	WHITE SEMI-TRANSPARENT	WHITE		
STERI-OIL	WHITE	WHITE		
STERI-BUFFER	CLEAR	WHITE		
DECON-PHENE	WHITE	WHITE		
DECON-CYCLE	WHITE	WHITE		
DECON-CLEAN	WHITE	WHITE		
DECON-QUAT 100	WHITE	WHITE		
DECON-QUAT 200C	WHITE	WHITE		
DECON-QUAT 200V	WHITE	WHITE		
HYPO-CHLOR 0.25%	WHITE	WHITE		
HYPO-CHLOR 0.52%	WHITE	WHITE		
HYPO-CHLOR 5.25%	WHITE	WHITE		
HYPO-CHLOR Neutral 0.25%	WHITE	WHITE		
HYPO-CHLOR Neutral 0.52%	WHITE	WHITE		
STERI-PEROX 3%	WHITE	WHITE		
STERI-PEROX 6%	WHITE	WHITE		
DECON-SPORE 200 PLUS (SPORICIDE)	WHITE SEMI-TRANSPARENT	WHITE		
DECON-SPORE 200 PLUS (DISINFECTANT)	WHITE SEMI-TRANSPARENT	WHITE		
STEEL-BRIGHT	WHITE	WHITE		
STERI-SILICON	WHITE	BLACK		
DECON-GLASS	WHITE	WHITE		
VAI WFI QUALITY WATER	WHITE	WHITE		
STERI-WATER	WHITE	WHITE		

Welcome to VAI® Wipers

Dry and Saturated Wipers

VAI offers a complete line of wipers, using various clean substrates and packaging to meet the needs of our diverse types of customers. VAI provides wipers in multiple chemical saturations, sizes, sorbency, and materials.

VAI wipers are available sterile or non-sterile and either saturated or dry. For sterile products, wipers are manufactured via aseptic fill at 0.2 microns into gamma irradiated sterile components in ISO 5 (Grade A/B, Former Class 100) or filled in ISO 5 (Grade A/B, Former Class 100), filtered at 0.2 microns, and subsequently terminally sterilized to 10^{-6} sterility assurance level. All materials are quality assurance tested and released to specifications defined by IEST and ASTM test methods. Individual lots are sterility tested according to the USP compendium with lot specific documentation available upon delivery.

Our wipers can be used in both aseptic and non-aseptic wipe downs of filling and packaging machinery, stainless steel, lexan, polycarbonate, glass, and any critical surface that requires cleaning. Our wipers are available in HYPO-CHLOR® Sodium Hypochlorite with Water For Injection in 0.25%, 0.52%, or 5.25% solutions, STERI-PEROX® Hydrogen Peroxide with Water For Injection in either 3% or 6% solutions, DECON-CLEAN® residue remover and cleaner, individual ALCOH-GLOVE® and ALCOH-WIPE® USP Isopropyl Alcohol with Water For Injection formulated at 70%, STER-AHOL® Denatured Ethanol with Water For Injection at 70%, bulk packaged Process2Wipe® USP Isopropyl Alcohol with Water For Injection at 70%, STEEL-BRIGHT® stainless steel cleaner, DAS-WIPE 100™ Sterile lubricant and stainless steel cleaner, and finally our two dry wipers, WipeDown® and WipeDown® HC.

39 WipeDown®
40 WipeDown® HC
41 WipeDown® 1-2-3
42 Process2Wipe®
43 HYPO-CHLOR® Wipe
44 DECON-CLEAN® Wipe
45 STERI-PEROX® Wipe
46 ALCOH-WIPE®
47 ALCOH-GLOVE®
48 STER-AHOL® Wipe
49 DAS-WIPE 100™ Sterile
50 STEEL-BRIGHT® Wipe

WIPEDOWN®

Laundered Polyester Dry Wipe

VAI®'s dry wipes are ultra-clean, superior, laundered dry wipes suitable for use in a cleanroom environment. These dry wipes are available in two sorbancy options, WipeDown and WipeDown HighSorb. WipeDown Dry Wipes are ideal for use in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. WipeDown HighSorb Dry Wipes are ideal for use in both aseptic and non-aseptic areas to keep the surface dry, residue free, and streak free after chemical application. WipeDown and WipeDown HighSorb Dry Wipes are available in a standard 12"x12" size.

VEL8-12X12-S-3002

The material used in the WipeDown and WipeDown HighSorb Dry Wipes is a 100% polyester that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. These wipes are packaged 20 wipers per bag in an opaque, easy-tear style bag.

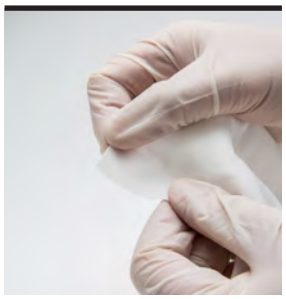
VEL8-12X12-S-3002
Packaging

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- Gamma irradiated at 10^{-6} SAL
- Cut using FocusEdge cutting technology
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Each sterile bag is bulk packaged in an additional single outer bag pack
- Packaged in an opaque, easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on a multitude of surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Delivered with lot specific Certificate of Irradiation and Certificate of Sterility
- HighSorb wipe has the sorbancy of a two ply wipe in a single wipe



WipeDown Material

WipeDown Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- Disinfectant application

WipeDown HighSorb Uses

- Aseptic or non-aseptic environments
- Post chemical application clean-up to wipe the surface dry and keep streak free
- To remove excess liquid and residue from the surface
- Spill control/product spills
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning

Order Number	*Description*	*Qty/Cs*
VEL8-12X12-S-3002	WipeDown Dry Wipe, 20 wipes/bag, 5 bags/pack, 6 packs/case, Sterile	600
VEL8-12X12-S-3031	WipeDown HighSorb Dry Wipe, 20 wipes/bag, 5 bags/pack, 6 packs/case, Sterile	600

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI)

WIPEDOWN® HC

Polyester and Cellulose Dry Wipe

VEL13-9X9-S-3013

VEL13-9X9-NS-HC-3024

VAI®'s WipeDown® HC Dry Wipes are high performance dry cleaning wipes that have been specifically designed for pharmaceutical, biotechnology, medical device, healthcare, pharmacy, compounding pharmacy, and hospital uses. These wipes can be used in clean environments on any critical surface that requires cleaning. WipeDown HC are the superior methodology for per-forming USP <797> compliant wipe downs. WipeDown HC Dry Wipes are available sterile or non-sterile in a 9"x9" size.

The material used in our WipeDown HC Dry Wipes is a polyester and cellulose blend that is especially clean, absorbent, and low in particulates while incorporating non-shedding features. VAI's sterile WipeDown HC Dry Wipes are package folded 20 wipers per bag in an opaque, easy-tear style bag with an additional single bag. The non-sterile WipeDown HC Dry wipes are packaged flat with 300 wipes per bag in an opaque, easy-tear style bag.

Quality and Manufacturing*

- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- Packaged in an opaque, easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on multiple surfaces
- Ideal for use in clean environments
- Superior methodology for performing USP <797> compliant wipe downs
- A polyester and cellulose blend wiper material that is designed to be clean and absorbent
- Material is low in particulates and has excellent non-shedding features
- Delivered with lot specific Certificate of Sterility and Certificate of Irradiation

Uses

- In clean environments
- For surface clean ups, IPA wipe downs, and cleaning and decontamination
- General wiping and contamination control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- Performing USP <797> compliant wipe downs

Order Number	*Description*	*Qty/cs*
VEL13-9X9-S-3013	WipeDown HC Dry Wipe, Packaged Folded, 20 wipes/bag, 20 bags/case, Sterile	400
VEL13-9X9-NS-HC-3024	WipeDown HC Dry Wipe, Packaged Flat, 300 wipes/bag, 5 bags/case, Non-Sterile	1500

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI)

WIPEDOWN® 1-2-3

Deactivates, Decontaminates, and Disinfects Most Hazardous Drug Surfaces For USP <800> Compliance in a Simple, Sterile, 3 Step Applicator Kit

VAI's WipeDown 1-2-3 has been designed to address the risk of occupational exposure to most hazardous drugs during compounding sterile preparations, and administering, as outlined in USP <800>. WipeDown 1-2-3 is a sterile 3 step application wipe kit, that when used in sequence, provides deactivation, decontamination, and disinfection/cleaning of sterile compounding surfaces from most hazardous drugs. WipeDown 1-2-3 satisfies both USP <797> compounding sterile preparations and USP <800> hazardous drugs – handling in healthcare settings.

Each Sterile WipeDown 1-2-3 kit includes:
- Packet #1 – HYPO-CHLOR®, USP 5.25% sodium hypochlorite for deactivation
- Packet #2 – THIO-WIPE®, 2% USP sodium thiosulfate for decontamination
- Packet #3 – ALCOH-WIPE®, 70% USP Isopropyl Alcohol for disinfecting/cleaning

All three packets consist of non-woven, non-shedding, 9"x12" and 12"x12" premium 100% polyester wiper materials that are designed to be exceptionally clean, to have excellent absorption capabilities, and to provide a substantial 9 square foot surface coverage. Each chemical component is formulated with Water for Injection and filtered at 0.2 microns with sterility assurance via aseptic filtration into sterile components or through gamma irradiation. Individual kits, containing all three packets, are individually bagged and packaged into a liner bag for easy transport into sterile areas. Each kit is individually labeled with lot number and expiration and each shipment of WipeDown 1-2-3 is supported by lot specific documentation.

VEL13-9X12-S-3123

Individual WipeDown 1-2-3 Kit


WipeDown 1-2-3 Packaging

Quality and Manufacturing*
- Lot sterility tested according to current USP compendium
- Formulated with Water for Injection
- Filtered at 0.2 microns
- Completely lot traceable
- All three chemicals are assayed according to current USP compendium
- Gamma irradiated or aseptically filled into sterile components

Features and Benefits
- Wipes are individually packaged
- Wipes folded for easy removal
- Packaged in an opaque, easy-tear style bag
- Kit is single bagged sterile with one box liner bag
- Designed to comply with USP <797>
- Ready-to-use
- 9"X12" or 12"x12" size
- Wiper material is low in particulate shedding and soluble extracts
- Deactivates most hazardous drugs present on compounding surface
- Delivered with lot specific documentation
- Each kit is individually labeled with lot number and expiration date

Order Number	*Description*	*Qty/Cs*
VEL13-9X12-S-3123	WipeDown 1-2-3, 3 Step Applicator Kit, 3 wipes/kit, 13 kits/box, 12 boxes/case, Sterile	156 kits

*All points do not apply to each product

Other Technical Data Available Upon Request
Product Technical Data Report • MSDS/SDS

PROCESS2WIPE®

70% USP Isopropyl Alcohol And 30% Water For Injection

VEL12-12X12-S-3023

VEL12-12X12-S-3023

Proces2Wipe IPA70 wipes are ready-to-use and saturated with VAI®'s low endotoxin DECON-AHOL WFI® Formula, a 70% USP Isopropyl Alcohol formulated with 30% Water for Injection. These wipes can be used in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. Process2Wipe is available sterile in a standard 12"x12" size.

The material used in our Process2Wipe is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's Process2Wipe wipers are packaged in an opaque, ported, peel and reseal style bag that allows for continued use after opening.

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- 70% USP IPA formulated with 30% USP Water for Injection is filtered at 0.2 microns
- Cut using FocusEdge cutting technology
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Each sterile bag is double bagged in easy tear bags
- Quadruple bagged via the ABCD Cleanroom Introduction System®
- Packaged in an opaque bag
- Peel and reseal label for continued use after opening
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on a multitude of surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Delivered with lot specific Certificate of Irradiation, Certificate of Sterility, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- To prevent overuse of Isopropyl Alcohol when compared to using trigger sprayers or gallon pour
- General wiping and contamination control

Order Number	*Description*	*Qty/Cs*
VEL12-12X12-S-3023	Process2Wipe IPA70, 20 wipes/bag, 10 bags/case, Sterile	200

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

HYPO-CHLOR® WIPE

Sodium Hypochlorite And Water For Injection

HYPO-CHLOR Wipes are saturated with a ready-to-use 0.25%, 0.52%, or 5.25% concentration of sodium hypochlorite formulated with Water for Injection. These wipes can be used in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. Ideal use is in broad or intricate locations where a sodium hypochlorite spray could create an excess of residue. HYPO-CHLOR Wipes are available sterile or non-sterile in a standard 12"x12" size.

The material used in our HYPO-CHLOR Wipes is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's HYPO-CHLOR Wipes are packaged in an opaque, ported, zip lock style bag that allows for continued use after opening.

VEL9-12X12-S-3020

VEL9-12X12-S-3018

VEL9-12X12-S-3025

VEL9-12X12-S-3026

Quality and Manufacturing*

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- Sodium hypochlorite solution is filtered at 0.2 microns
- Formulated with Water for Injection
- Cut using FocusEdge cutting technology
- Aseptically filled into sterile components via gamma irradiation at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Each sterile bag is double bagged in easy tear bags
- Quadruple bagged via the ABCD Cleanroom Introduction System®
- Packaged in an opaque, zip-lock style, easy tear bag
- Re-sealable for continued use after opening
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- Three concentrations: 0.25%, 0.52%, 5.25%
- For use on multiple surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Delivered with lot specific Certificate of Sterility, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- Where a sodium hypochlorite spray would create excess residue
- To prevent overuse of sodium hypochlorite when compared to using trigger sprayers or gallon pour

Order Number	*Description*	*Qty/Cs*
VEL9-12X12-3021	HYPO-CHLOR 0.25% Wipe, 20 wipes/bag, 10 bags/case, Non-Sterile	200
VEL9-12X12-S-3020	HYPO-CHLOR 0.25% Wipe, 20 wipes/bag, 10 bags/case, Sterile	200
VEL9-12X12-3019	HYPO-CHLOR 0.52% Wipe, 20 wipes/bag, 10 bags/case, Non-Sterile	200
VEL9-12X12-S-3018	HYPO-CHLOR 0.52% Wipe, 20 wipes/bag, 10 bags/case, Sterile	200
VEL9-12X12-S-3025	HYPO-CHLOR 5.25% Wipe, 20 wipes/bag, 5 bags/case, Sterile	100
VEL9-12X12-S-3026	HYPO-CHLOR 0.52% Wipe, Individually Bagged, Sterile	100

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

DECON-CLEAN® WIPE

Residue Remover and Cleaner

VEL14-12X12-S-4002

VEL14-12X12-S-4002

DECON-CLEAN Wipes are ready-to-use and saturated with VAI®'s DECON-CLEAN residue remover and cleaner solution. DECON-CLEAN Wipes are designed to remove residue from disinfecting agents left behind on any critical surface that requires cleaning. DECON-CLEAN Wipes are available sterile in a standard 12"x12" size.

The material used in our DECON-CLEAN Wipes is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's DECON-CLEAN Wipes are packaged in an opaque, ported, peel and reseal style bag that allows for continued use after opening.

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- DECON-CLEAN Wipe residue remover and cleaner solution is filtered and formulated with Water for Injection
- Cut using FocusEdge cutting technology
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Each sterile bag is double bagged in easy tear bags
- Quadruple bagged via the ABCD Cleanroom Introduction System®
- Packaged in an opaque bag
- Peel and reseal label for continued use after opening
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- Removes residues left behind from disinfecting agents that build up on surfaces overtime
- For use on multiple surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Delivered with lot specific Certificate of Irradiation, Certificate of Sterility, Certificate of Analysis, and Certificate of Conformance

Uses

- Removes residues left behind from disinfecting agents
- Returns the surface to its original form for future disinfection
- General wiping in aseptic or non-aseptic evironments
- Wipe downs on filling and packaging machinery
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- To prevent overuse of chemicals when compared to using trigger sprayers or gallon pours

Order Number	*Description*	*Qty/Cs*
VEL14-12X12-S-4002	DECON-CLEAN Wipe, 20 wipes/bag, 10 bags/case, Sterile	200

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STERI-PEROX® WIPE

Hydrogen Peroxide And Water For Injection

STERI-PEROX Wipes are saturated with a ready-to-use 3% or 6% concentration of hydrogen peroxide solution formulated with Water for Injection. These wipes can be used in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. Ideal use is in broad or intricate locations where the need to reduce possible VOC's is required. STERI-PEROX Wipes are available sterile or non-sterile in a standard 12"x12" size.

The material used in our STERI-PEROX Wipes is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's STERI-PEROX Wipes are packaged in an opaque, ported, peel and reseal style bag that allows for continued use after opening.

VEL10-12X12-S-3014

VEL10-12X12-S-3014

VEL10-12X12-3016

VEL10-12X12-3017

Quality and Manufacturing*

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- Hydrogen peroxide solution is filtered at 0.2 microns
- Formulated with Water for Injection
- Cut using FocusEdge cutting technology
- Aseptically filled into sterile components via gamma irradiation at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits*

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Each sterile bag is double bagged in easy tear bags
- Quadruple bagged via the ABCD Cleanroom Introduction System®
- Packaged in an opaque bag
- Peel and reseal label for continued use after opening
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- Two concentrations: 3% or 6% to fit your needs
- Reduced VOC's
- For use on multiple surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Delivered with lot specific Certificate of Sterility, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- To reduce VOC's
- To prevent overuse of hydrogen peroxide when compared to using trigger sprayers or gallon pour

Order Number	*Description*	*Qty/Cs*
VEL10-12X12-S-3014	STERI-PEROX 3% Wipe, 20 wipes/bag, 10 bags/case, Sterile	200
VEL10-12X12-3015	STERI-PEROX 3% Wipe, 20 wipes/bag, 10 bags/case, Non-Sterile	200
VEL10-12X12-S-3016	STERI-PEROX 6% Wipe, 20 wipes/bag, 10 bags/case, Sterile	200
VEL10-12X12-3017	STERI-PEROX 6% Wipe, 20 wipes/bag, 10 bags/case, Non-Sterile	200

*All points do not apply to Non-Sterile products

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

ALCOH-WIPE®

Individually Packaged 70% USP Isopropyl Alcohol and 30% Water for Injection

VEL6-12X12-S-2302

The ALCOH-WIPE is ready-to-use, individually packaged, and saturated with VAI®'s, low endotoxin 70% USP Isopropyl Alcohol and 30% Water for Injection DECON-AHOL WFI® Formula. These wipes can be used in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. The ALCOH-WIPE has been specifically designed for operations that require the use of an individually packaged and sterile IPA wipe. The ALCOH-WIPE is available sterile in a 6"x6", 12"x12", and 18"x18" sizes.

The material used in our ALCOH-WIPE is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's ALCOH-WIPE is packaged in an opaque, ported, and easy-tear style bag.

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- 70% USP Isopropyl Alcohol and 30% Water for Injection solution is filtered at 0.2 microns
- Formulated with Water for Injection
- Cut using FocusEdge cutting technology
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Individually bagged with two liner bags
- Packaged in an opaque easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on multiple surfaces
- Low endotoxins
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Available in three sizes
- Ready-to-use
- Delivered with lot specific Certificate of Sterility, Certificate of Irradiation, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- In operations that require an individually bagged IPA wiper
- To prevent overuse of IPA when compared to using trigger sprayers or gallon pour

Order Number	*Description*	*Qty/Cs*
VEL6-6X6-S-2307	ALCOH-WIPE, 6"x6", Individually Bagged, Sterile	100
VEL6-12X12-S-2302	ALCOH-WIPE, 12"x12", Individually Bagged, Sterile	100
VEL6-18X18-S-2304	ALCOH-WIPE, 18"x18", Individually Bagged, Sterile	100

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

ALCOH-GLOVE®

Individually Packaged 70% USP Isopropyl Alcohol and 30% Water for Injection

The ALCOH-GLOVE is a ready-to-use and individually packaged glove style wiper that is saturated with VAI's 70% USP Isopropyl Alcohol and 30% Water for Injection DECON-AHOL WFI® Formula. The ALCOH-GLOVE is a remarkable innovation that resembles the shape of a dust mitten. This contoured product provides 100% coverage of the hand. With the ability to assure pinpoint cleaning, the ALCOH-GLOVE places an additional assurance level to cleaning operations. The ALCOH-GLOVE is available in an 8"x 4" (20.32 x 10.16 cm) glove size and sterile.

The material used in our ALCOH-GLOVE is a white, clean, and absorbent 100% tubular knit polymer that is sewn at one end and then turned inside out. VAI's ALCOH-GLOVE is packaged in a clear and easy-tear style bag.

AG-04-70%-9053

Quality and Manufacturing

- 70% USP Isopropyl Alcohol and 30% Water for Injection solution is filtered at 0.2 microns
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- Individually bagged with two liner bags
- Packaged in a clear easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on multiple surfaces
- Ready-to-use
- 100% tubular knit polymer that is manufactured to be clean and absorbent
- 8"x4" size – resembles the shape of a dust mitten for full coverage
- Assures pinpoint cleaning in critical environments
- Delivered with lot specific Certificate of Sterility, Certificate of Irradiation, and Certificate of Analysis

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- In operations that require an individually bagged IPA wiper that provides full coverage of the hands
- For pinpoint cleaning in critical environments
- To prevent overuse of IPA when compared to using trigger sprayers or gallon pour

Order Number	Description	Qty/Cs
AG-04-70%-9053	ALCOH-GLOVE, Individually Bagged, Sterile	100

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STER-AHOL® WIPE

70% Denatured Ethanol and 30% Water for Injection

VEL6-12X12-S-2320

The STER-AHOL Wipe is ready-to-use, individually packaged, and saturated with VAI®'s 70% USP Denatured Ethanol and 30% Water for Injection STER-AHOL® WFI Formula. These wipes can be used in both aseptic and non-aseptic wipe downs on any critical surface that requires cleaning. The STER-AHOL Wipe has been specifically designed for operations that require the use of an individually packaged and sterile EtOH wipe. The STER-AHOL Wipe is available sterile in a standard 12"x12" size.

The material used in our STER-AHOL Wipe is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's STER-AHOL Wipe is packaged in an opaque, ported, and easy-tear style bag.

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- 70% Denatured Ethanol and 30% Water for Injection solution is filtered at 0.2 microns
- Formulated with Water for Injection
- Cut using FocusEdge cutting technology
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Individually bagged with two liner bags
- Packaged in an opaque easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- For use on multiple surfaces
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Delivered with lot specific Certificate of Sterility, Certificate of Irradiation, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- Wipe downs on filling and packing machinery
- Spill control
- On lexan, glass, polycarbonate, stainless steel or any other critical surface that requires cleaning
- In operations that require an individually bagged denatured ethanol wiper
- To prevent overuse of EtOH when compared to using trigger sprayers or gallon pour

Order Number	*Description*	*Qty/Cs*
VEL6-12X12-S-2320	STER-AHOL Wipe, Individually Bagged, Sterile	100

Other Technical Data Available Upon Request

Product Technical Data Report • Specific Test Reports (Consult VAI) • MSDS/SDS

WARNING: This product can expose you to chemicals including Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

DAS-WIPE 100 Sterile

Stainless Steel Cleaner and Lubricant

DW100-12X12-S-2319

The DAS-WIPE 100™ Sterile is a ready-to-use, individually packaged, and saturated wipe with VAI®'s DAS stainless steel cleaner and lubricant solution. The DAS-WIPE 100 Sterile has been specifically designed to replace silicon in aseptic manufacturing areas. These wipes are also an excellent choice for cleaning metals, including stainless steel, in cleanroom operations due to its excellent cleaning capabilities and low remaining residue. The DAS-WIPE 100 Sterile is available sterile in a standard 12"x12" size.

The material used in our DAS-WIPE 100 Sterile is a 100% continuous knit polyester filament that has been specifically designed to be clean and absorbent. VAI uses FocusEdge cutting technology to cut their wipes that seals the edges and reduces shedding to a minimum during wipe downs or general use. VAI's DAS-WIPE 100 Sterile is packaged in a clear and easy-tear style bag.

Quality and Manufacturing

- Wipe material laundered in ISO 4 (Grade A/B, Former Class 10)
- DAS-WIPE 100 Sterile solution is filtered at 0.2 microns
- Cut using FocusEdge cutting technology
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Individually bagged with two liner bags
- Packaged in a clear easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- 100% synthetic filament polyester constructed in a continuous knit that minimizes fiber and particulate release
- Material is exceptionally clean and absorbent
- Resistance to abrasion and picking
- FocusEdge allows for minimal shedding via sealed edges
- Ready-to-use
- Excellent for cleaning metals including stainless steel and as a general lubricant
- Replaces silicon in critical aseptic manufacturing areas and ensure bottles do not stick as they approach the critical fill site
- Delivered with lot specific Certificate of Sterility, Certificate of Irradiation, Certificate of Analysis, and Certificate of Conformance

Uses

- Aseptic or non-aseptic environments
- To replace silicon in aseptic manufacturing areas
- Ideal on turntables and process lines to assure bottles do not stick during movement to critical fill site
- As a general lubricant
- Polish stainless steel and other materials
- In operations that require an individually bagged and sterile lubricating wipe

Order Number	*Description*	*Qty/Cs*
DW100-12X12-S-2319	DAS-WIPE 100 Sterile, Individually Bagged, Sterile	100

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS

STEEL-BRIGHT® WIPE

Stainless Steel Polish and Cleaner

SBW-12X12-S-2315

The STEEL-BRIGHT Wipe is ready-to-use, individually packaged, and saturated with VAI®'s STEEL-BRIGHT stainless steel polish and cleaner solution. The STEEL-BRIGHT Wipe is an excellent choice for cleaning, removing spots and stains, and polishing metal and equipment in cleanroom operations due to its excellent cleaning capabilities and low remaining residue. These wipes can be used on stainless steel, chrome, brass, aluminum, and copper. The STEEL-BRIGHT Wipe is available sterile in a standard 12"x12" size.

The material used in our STEEL-BRIGHT Wipe is a while 100% polyester material that is manufactured to be clean and absorbent by minimizing fiber and particulate release. VAI's STEEL-BRIGHT Wipe is packaged in an opaque and easy-tear style bag.

Quality and Manufacturing

- STEEL-BRIGHT solution is filtered at 0.2 microns
- Gamma irradiated at 10^{-6} SAL
- Lot sterility tested according to current USP compendium
- Completely traceable from start to finish
- Completely validated for sterility and shelf life

Features and Benefits

- ISO 5 (Grade A/B, Former Class 100) Cleanliness
- Individually bagged with two liner bags
- Packaged in a opaque easy-tear style bag
- Wipes folded for easy removal
- Individually labeled with lot number and expiration
- 100% polyester wipe material designed to be clean and absorbent
- Professional strength cleaner that brightens and polishes without leaving a powdery residue
- Has excellent cleaning capabilities
- Emulsion based cleaner that will not rainbow or accumulate to a heavy build up
- Surfaces will remain cleaner longer because there is no residue film to attract soil
- Ready-to-use
- Pleasantly lemon scented and contains no acids or abrasives
- Delivered with lot specific Certificate of Sterility, Certificate of Irradiation, and Certificate of Conformance

Uses

- Stainless steel, chrome, brass, aluminum and copper
- Aseptic or non-aseptic environments on metals and equipment
- To clean, brighten, polish, remove spots and stains, and remove chemical residues
- In operations that require an individually bagged stainless steel cleaner and polish

Order Number	*Description*	*Qty/Cs*
SBW-12X12-S-2315	STEEL-BRIGHT Wipe, Individually Bagged, Sterile	100

Other Technical Data Available Upon Request

Product Technical Data Report • Validation Report • Specific Test Reports (Consult VAI) • MSDS/SDS


CORE

Critical Ongoing Residue Evaluation®

What is the CORE® Program?

While years have gone by and technology has changed, many GMP firms have not re-evaluated the effectiveness of their process cleaning detergents. At the same time, the industry grows and new operations manufacturing new products blossom each day. In both scenarios, the need for routine evaluations to be conducted is essential to achieve overall site optimization. In the competitive world, cleaning down time costs firms enormous amounts of overhead, time, and money. Normally these costs can be dramatically reduced by the use of more efficient and state-of-the-art detergents that work specifically against residues in current times. At the same time, firms also find that combination cleaning, not in present scopes, reduce the amount of cleaning time, cleaning chemicals used, and the level of personnel required to clean critical surfaces.

The proper selection of optimal detergents can also positively affect: substrate integrity, effluent concerns, overall chemical usage, storage, and inventory issues. The CORE (Critical Ongoing Residue Evaluation) program is a service offered within the VAI® Laboratories division of VAI. The focus of the division is to provide our clients with a specialized laboratory service that can assist them in performing product contact cleaning evaluation studies as an external service. This department utilizes user product residues on Stainless Steel coupons in our unique CORE Analysis Chamber to determine the level of cleaning achieved by detergents that are utilized in operations.

The CORE program provides an excellent means to define where present systems are and where they want to be in the future. May it be older operations or a new operation, the CORE program provides the requirements necessary to meet both internal requirements and external regulatory expectations by providing you, the end user, sound scientific rationale in your detergent selection process. VAI's comprehensive pharma-biotech cleaning program also provides analytical methods of detection specific to VAI's process cleaners as well as compatibility, TOC curves, conductivity curves, toxicological reports, and other controlled documents to help support your cleaning validation plans.

PROCESS2CLEAN®
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

Welcome to Process2Clean

Process2Clean cleaning products have been specifically formulated for critical process cleaning applications. In this venue, the appropriate use of process cleaning detergents warrants two concerns. The first concern relates to the ability of the chosen detergent to remove existent product residues that may exist in either open or closed process manufacturing equipment, vessels, or line circuits. The second concern is the ability to rinse free the process soil and detergent down to acceptable trace residual limits. This process assures that all product contact surfaces are clean prior to the formulation of subsequent product lots and eliminates the possibility of product contamination or product adulteration.

Process2Clean cleaning products have been engineered to effectively remove a multitude of pharmaceutical, biotechnology, cosmetic, medical device, food & beverage, and research & development manufacturing residues. All products are formulated with Water For Injection (WFI) and follow the highest quality manufacturing standards in VAI's GMP manufacturing facility. All VAI Process2Clean detergents are available in both sterile and non-sterile versions. The sterile version is ultra clean and assures that less contamination is introduced to the system.

A complete lot documentation package is provided with each product shipped. Also a comprehensive support package specific to each individual, VAI, detergent product is available to assist you with your cleaning validation plans.

56 Process2Clean® 1 - Alkaline Detergent
57 Process2Clean® 2 - Acid Based Detergent
58 Process2Clean® 3 - Hydroxyacetic Acid Cleaner
59 Process2Clean® 4 - General Purpose Cleaning Detergent
60 Process2Clean® 5 - Neutral pH Cleaning Additive
61 Process2Clean® 6 - Chlorinated Alkaline Cleaning Detergent

Lot Specific Documentation Package

Every Process2Clean product is shipped with a complete lot certification and documentation package to ensure product consistency, integrity, and traceability. All lots are traced through the master batch records.

Features

- Designed for the pharmaceutical, biotechnology, cosmetic, medical device, animal research, and food and beverage industries
- Enhanced cleaning properties with very free rinsing capabilities
- Highly concentrated formulas provides low cost per use
- Use dilutions range from .5% to 5% dependent upon the soil load and application
- Most product sizes are available in sterile or non-sterile formulas
- Available in 1, 5, 30, 55, and 275 gallon containers
- Recycling options offered for 30, 55, and 275 gallon containers
- Contains chelating agents for hard water tolerance
- Contains premium surfactants for great wetting ability and optimal penetration
- Optimal formulation eliminates the need for hazardous organic solvents
- Phosphate free formulas are ecologically safe
- Low and non-foaming formulas are ideal for optimal automated cleaning
- Excellent detergency
- Complete solubility
- Biodegradable

Testing and Validation

Customize an optimal cleaning program to meet your specific process needs with VAI's comprehensive validation support packages and customized testing program. Validation support packages include last-to-rinse studies and specific and non-specific analytical product residue detection methods. VAI's CORE® (Critical Ongoing Residue Evaluation) Laboratory program will assist with customized soil testing to meet your specific needs. Contact your VAI sales representative for more information.

Safety

For cautionary and first aid information, consult the material safety data sheet or product label. Please contact your VAI sales representative for further safety and or use recommendations.

Other Technical Data Available Upon Request

A comprehensive support package specific to each individual product is available to assist with your cleaning validation plans. Documents include but are not limited to:

- Product Validation Report
- Product Sterility Validation Report
- Technical Product PDF File
- Safety Data Sheet
- Last-to-Rinse reports
- Specific and Non-Specific Analytical Test Methods for Residue Detection
- Toxicological studies
- Product compatibility studies
- Product formulation disclosure
- On-site technical assistance

PROCESS 2 CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

one

PC-1-1G-01


PC-1-5G-01


PC-1-30G-01


PC-1-275G-01

Process2Clean 1 Alkaline Detergent is a high performance and concentrated detergent that is VAI's most effective broad spectrum cleaning agent for removing a wide array of residues. This potassium hydroxide detergent formulated with surfactants and chelating agents, has been specifically designed for automation cleaning (CIP) requirements and is capable of removing most all organic soil loads. Process2Clean 1 is phosphate free, has minimal to no foaming, and has excellent detergency and rising capabilities.

Process2Clean 1 Alkaline Detergent Specifications*	
Characteristic	Alkaline
Color	Colorless
Appearance	Clear
Odor	Slight odor
Specific Gravity	1.20 - 1.40
pH (1% solution)	11.8 - 13.8
Conductivity (1% solution)	10.0 - 15.0 mS
P Content	0.00%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Minimal to none
Storage Recommendation	Ambient
Process2Clean 1 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass, enamel, plastics, and most elastomers	
Process2Clean 1 Cleaning Residue Specialties	
Proteins, excipients, fine chemicals, silicones, oils, petrolatum, polymers, waxes, fats, and most all types of organics	
Process2Clean 1 Applications	
Automated washers, spray systems, soak, or manual washing	

Order Number	*Description*	*Qty/Cs*
PC-1-1G-01	Process2Clean 1, 1 Gallon, Non-Sterile	4
PC-1-1G-02	Process2Clean 1, 1 Gallon, Sterile	4
PC-1-5G-01	Process2Clean 1, 5 Gallon Drum, Non-Sterile	1
PC-1-5G-02	Process2Clean 1, 5 Gallon Drum, Sterile	1
PC-1-30G-01	Process2Clean 1, 30 Gallon Drum, Non-Sterile	1
PC-1-30G-02	Process2Clean 1, 30 Gallon Drum, Sterile	1
PC-1-55G-01	Process2Clean 1, 55 Gallon Drum, Non-Sterile	1
PC-1-55G-02	Process2Clean 1, 55 Gallon Drum, Sterile	1
PC-1-275G-01	Process2Clean 1, 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PROCESS 2 CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

two

Process2Clean 2 Acid Based Detergent is a high performance and concentrated detergent that is one of VAI's most effective acid cleaning agents for removing a wide array of residues. This phosphoric acid detergent formulated with surfactants and chelating agents, helps to reduce corrosion, pitting, and rusting and is capable of removing most all inorganic soil loads. Process2Clean 2 is low foaming, has excellent detergency characteristics, and is very free rinsing.

Process2Clean 2 Acid Based Detergent Specifications*	
Characteristic	Acidic
Color	Clear - pale yellow
Appearance	Clear
Odor	Slight odor
Specific Gravity	1.170 - 1.370
pH (1% solution)	0.86 - 2.86
Conductivity (1% solution)	5.1 - 9.1 mS
P Content	29.70%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Low
Storage Recommendation	Ambient
Process2Clean 2 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass, and a variety of plastics	
Process2Clean 2 Cleaning Residue Specialties	
Inorganic soils including scale deposits, fine chemicals, polymers, particulate carbons, and coatings	
Process2Clean 2 Applications	
Automated wash equipment, spray systems, soak, and manual cleaning	

Order Number	*Description*	*Qty/Cs*
PC-2-1G-01	Process2Clean 2, 1 Gallon, Non-Sterile	4
PC-2-1G-02	Process2Clean 2, 1 Gallon, Sterile	4
PC-2-5G-01	Process2Clean 2, 5 Gallon Drum, Non-Sterile	1
PC-2-5G-02	Process2Clean 2, 5 Gallon Drum, Sterile	1
PC-2-30G-01	Process2Clean 2, 30 Gallon Drum, Non-Sterile	1
PC-2-30G-02	Process2Clean 2, 30 Gallon Drum, Sterile	1
PC-2-55G-01	Process2Clean 2, 55 Gallon Drum, Non-Sterile	1
PC-2-55G-02	Process2Clean 2, 55 Gallon Drum, Sterile	1
PC-2-275G-01	Process2Clean 2, 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PC-2-1G-01

PC-2-5G-01


PC-2-30G-01


PC-2-275G-01

PROCESS 2 CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

three

PC-3-1G-01


PC-3-5G-01


PC-3-30G-01


PC-3-275G-01

Process2Clean 3 Hydroxyacetic Acid Cleaner is a high performance and concentrated detergent that is extremely effective and capable of removing a wide array of inorganic soils and residues. This hydroxyacetic acid (glycolic acid) detergent formulated with surfactants and chelating agents, is helpful in the removal of free metals with routine use reducing corrosion, pitting, and rusting. Process2Clean 3 is phosphate free, is minimal to non-foaming at all temperatures, has excellent detergency, and is very free rinsing.

Process2Clean 3 Hydroxyacetic Acid Cleaner Specifications*	
Characteristic	Acidic
Clarity	Clear
Appearance	Clear - pale yellow
Odor	Slight odor
Specific Gravity	1.020 - 1.220
pH (1% solution)	1.67 - 3.67
Acidity	17.0 - 27.0%
P Content	0.00%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Minimal to none
Storage Recommendation	Ambient
Process2Clean 3 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass, and a variety of plastics	
Process2Clean 3 Cleaning Residue Specialties	
Inorganic soils including scale deposits, fine chemicals, polymers, particulate carbons, coatings, and is especially effective on antacid formulations	
Process2Clean 3 Applications	
Automated wash equipment, spray systems, soak, and manual cleaning	

Order Number	*Description*	*Qty/Cs*
PC-3-1G-01	Process2Clean 3, 1 Gallon, Non-Sterile	4
PC-3-1G-02	Process2Clean 3, 1 Gallon, Sterile	4
PC-3-5G-01	Process2Clean 3, 5 Gallon Drum, Non-Sterile	1
PC-3-5G-02	Process2Clean 3, 5 Gallon Drum, Sterile	1
PC-3-30G-01	Process2Clean 3, 30 Gallon Drum, Non-Sterile	1
PC-3-30G-02	Process2Clean 3, 30 Gallon Drum, Sterile	1
PC-3-55G-01	Process2Clean 3, 55 Gallon Drum, Non-Sterile	1
PC-3-55G-02	Process2Clean 3, 55 Gallon Drum, Sterile	1
PC-3-275G-01	Process2Clean 3, 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PROCESS 2 CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

four

Process2Clean 4 General Purpose Cleaning Detergent is a high performance and concentrated neutral pH detergent with elevated foam characteristics that is extremely effective in removal of a wide array of residues. This glycolic acid detergent formulated with surfactants and chelating agents, can be used as a stand-alone cleaner or as an additive to alkaline cleaners to enhance their cleaning capabilities. Process2Clean 4 is phosphate free and has excellent detergency with the ability to rinse free from systems.

Process2Clean 4 General Purpose Cleaning Detergent Specifications*	
Characteristic	Neutral pH
Clarity	Clear
Appearance	Yellow
Odor	Slight odor
Specific Gravity	1.000 - 1.200
pH (1% solution)	8.0 - 10.0
Conductivity (1% solution)	0.8 - 2.1 mS
P Content	0.00%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Moderate to high
Storage Recommendation	Ambient
Process2Clean 4 Material Compatibility At Recommended Use Dilutions	
Most all process and environmental substrates and can be used as a cleaner for use on equipment exteriors, walls, floors, and ceilings	
Process2Clean 4 Cleaning Residue Specialties	
Ointments, creams, oils, waxes, polymers, and petrolatum based products	
Process2Clean 4 Applications	
All low agitation applications, spray systems, soak systems, or manual applications, not suitable for automated recirculation cleaning applications	

Order Number	*Description*	*Qty/Cs*
PC-4-1G-01	Process2Clean 4, 1 Gallon, Non-Sterile	4
PC-4-1G-02	Process2Clean 4, 1 Gallon, Sterile	4
PC-4-5G-01	Process2Clean 4, 5 Gallon Drum, Non-Sterile	1
PC-4-5G-02	Process2Clean 4, 5 Gallon Drum, Sterile	1
PC-4-30G-01	Process2Clean 4, 30 Gallon Drum, Non-Sterile	1
PC-4-30G-02	Process2Clean 4, 30 Gallon Drum, Sterile	1
PC-4-55G-01	Process2Clean 4, 55 Gallon Drum, Non-Sterile	1
PC-4-55G-02	Process2Clean 4, 55 Gallon Drum, Sterile	1
PC-4-275G-01	Process2Clean 4 , 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PC-4-1G-01


PC-4-5G-01


PC-4-30G-01


PC-4-275G-01

PROCESS2CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

five


PC-5-1G-01


PC-5-5G-01


PC-5-30G-01


PC-5-275G-01

Process2Clean 5 Neutral pH Cleaning Additive is a high performance and concentrated neutral pH additive detergent that is capable of removing of a wide array of residues. This detergent's stabilized formula with surfactants and chelating agents, can be used as a stand-alone cleaner or as an additive to improve the cleaning performance of all VAI cleaners. Process2Clean 5 is phosphate free, is low foaming at elevated temperatures, has excellent wetting ability, and is free rinsing.

Process2Clean 5 Neutral pH Cleaning Additive Specifications*	
Characteristic	Neutral pH
Clarity	Clear
Appearance	Yellow
Odor	Slight chemical characteristics
Specific Gravity	0.990 - 1.100
pH (1% solution)	7.5 - 9.0
Conductivity (1% solution)	0.05 - 0.20 mS
P Content	0.00%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Minimal to none - 120°F Cloud Point - Offers foam below that set point and no foam realized above that set point for automated cleaning applications
Storage Recommendation	Ambient
Process2Clean 5 Material Compatibility At Recommended Use Dilutions	
Most all substrate material	
Process2Clean 5 Cleaning Residue Specialties	
Oils, waxes, greases, petrolatum-based products, coatings, emulsions, and most all other types of inorganic materials	
Process2Clean 5 Applications	
Recirculated systems, soak tanks, and spray or manual cleaning	

Order Number	*Description*	*Qty/Cs*
PC-5-1G-01	Process2Clean 5, 1 Gallon, 5 Non-Sterile	4
PC-5-1G-02	Process2Clean 5, 1 Gallon, 5 Sterile	4
PC-5-5G-01	Process2Clean 5, 5 Gallon Drum, Non-Sterile	1
PC-5-5G-02	Process2Clean 5, 5 Gallon Drum, Sterile	1
PC-5-30G-01	Process2Clean 5, 30 Gallon Drum, Non-Sterile	1
PC-5-30G-02	Process2Clean 5, 30 Gallon Drum, Sterile	1
PC-5-55G-01	Process2Clean 5, 55 Gallon Drum, Non-Sterile	1
PC-5-55G-02	Process2Clean 5, 55 Gallon Drum, Sterile	1
PC-5-275G-01	Process2Clean 5, 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PROCESS2CLEAN
FOR CRITICAL CLEAN IN PLACE APPLICATIONS

six

Process2Clean 6 Chlorinated Alkaline Cleaning Detergent is a high performance and concentrated detergent that is capable of removing of a wide array of residues. This detergent's potassium hydroxide and sodium hypochlorite formula with surfactants and chelating agents, has been designed specifically for the removal of proteinaceous soils in manual and automation cleaning applications. Process2Clean 6 has excellent rinsing capabilities, has minimal to no foaming, contains buffering agents, and contains no phosphates.

Process2Clean 6 Chlorinated Alkaline Cleaning Detergent Specifications*	
Characteristic	Alkaline
Clarity	Clear
Appearance	Yellow
Odor	Chlorine - like
Specific Gravity	1.100 - 1.300
pH (1% solution)	11.0 - 13.0
Conductivity (1% solution)	6.50 - 8.50 mS
P Content	0.00%
Detergency	Excellent
Solubility	Miscible with water
Foaming	Minimal to none
Storage Recommendation	Ambient
Process2Clean 6 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass, most elastomers, and contains a buffering agent that promotes optimal substrate integrity	
Process2Clean 6 Cleaning Residue Specialties	
Proteins, excipients, silicones, ointments, creams, oils, waxes, animal fats, greases, petrolatum-based products, and most all organic material	
Process2Clean 6 Applications	
Mechanical systems, automated wash, spray, soak, pressure spray, or manual washing	

Order Number	*Description*	*Qty/Cs*
PC-6-1G-01	Process2Clean 6, 1 Gallon, Non-Sterile	4
PC-6-1G-02	Process2Clean 6, 1 Gallon, Sterile	4
PC-6-5G-01	Process2Clean 6, 5 Gallon Drum, Non-Sterile	1
PC-6-5G-02	Process2Clean 6, 5 Gallon Drum, Sterile	1
PC-6-30G-01	Process2Clean 6, 30 Gallon Drum, Non-Sterile	1
PC-6-30G-02	Process2Clean 6, 30 Gallon Drum, Sterile	1
PC-6-55G-01	Process2Clean 6, 55 Gallon Drum, Non-Sterile	1
PC-6-55G-02	Process2Clean 6, 55 Gallon Drum, Sterile	1
PC-6-275G-01	Process2Clean 6, 275 Gallon Drum, Non-Sterile	1

*All points do not apply to Non-Sterile products

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

PC-6-1G-01


PC-6-5G-01


PC-6-30G-01


PC-6-275G-01

Welcome to Cage2Wash

VAI® offers a very comprehensive cleaning and decontamination program specific to the Biomedical Research field. VAI's line of Cage2Wash cleaning products have been specifically formulated for lab animal cage washing, ancillary component cleaning, and environmental decontamination applications. The proper selection and use of the appropriate cleaning and decontamination agents to remove animal waste and control environmental contamination is critical to any research program.

VAI's highly built GMP detergents are exceptionally effective in cleaning a wide variety of residues including, but not limited to; uric scale, water scale, animal fats, oils, organics, other related animal byproducts, and bioburden residues. VAI also has a line of enzymatic detergents ideal for surgical instrument cleaning and scale removal.

VAI's LAR program also includes a wide line of veterinary disinfectants, sporicidal agents, disposable garments, shoe covers, bouffant hats, chemical application equipment, and more. All of these products work together to control contamination and build a comprehensive LAR program solution for your operation. We also help you spec out and optimize your operations by offering a full line of equipment including, foam units, sprayers, proportioners, and chemical delivery pumps where applicable.

64 Cage2Wash® 1 - Alkaline Detergent
65 Cage2Wash® 2 - Enhanced Alkaline Detergent
66 Cage2Wash® 3 - Acid Based Detergent
67 Cage2Wash® 4 - Hydroxyacetic Acid Detergent
68 Cage2Wash® 5 - Citric Acid Cleaner Detergent/De-Scaler
69 Cage2Wash® N - Alkaline Based Neutralizer
70 DECON-QUAT® 200V - Veterinary Quaternary Ammonium

CAGE2WASH

Lot Specific Documentation Package

Every Cage2Wash product is shipped with a complete lot certification and documentation package to ensure product consistency, integrity, and traceability. All lots are traced through the master batch records.

Features

- Enhanced cleaning properties with free rinsing capabilities
- Highly concentrated formula provides low cost per use
- Contains chelating agents for hard water tolerance
- Contains premium surfactants for excellent wetting ability and optimal penetration
- Optimal formulation eliminates the need for hazardous organic solvents
- Phosphate free formulas are ecologically safe
- Low and non-foaming formulas are ideal for optimal automated cleaning
- Complete solubility
- Biodegradable
- Available in 1, 5, 30, 55, and 275 gallon containers.
- Recycling options offered for 30, 55, and 275 gallon containers

Other Technical Data Available Upon Request

- Sample Lot Specific Certification
- Technical Product PDF File
- Safety Data Sheet
- Compatibility Reports

CAGE2WASH one

C-1-1G-01


C-1-5G-01


C-1-30G-01


C-1-275G-01

Cage2Wash 1 Alkaline Detergent is a high performance concentrated liquid alkaline cleaning agent designed specifically for automation cleaning in the lab animal research field. Cage2Wash 1 is formulated with potassium hydroxide, surfactants and other critically essential cleaning ingredients. This product is a low foaming cleaning agent (at all temperatures) and has enhanced cleaning ability to rinse free from systems.

Cage2Wash 1 Alkaline Detergent Specifications	
Characteristic	Alkaline
Detergency	Excellent
Color	Colorless
Clarity	Turbid
Odor	Slight odor
Specific Gravity	1.240 - 1.440 mS
pH (1% solution)	12.1 - 12.8
Foaming	Low foaming
Storage Recommendation	Ambient
Phosphate Free	Yes
P Content	0.00%
N Content	0.00%
Cage2Wash 1 Material Compatibility At Recommended Use Dilutions	
Stainless steel, aluminum, copper, galvanized steel, soft metals, glass, polypropylene, polycarbonates, polysulfone, polyetherimide, and a wide vareity of plastics	
Cage2Wash 1 Cleaning Residue Specialties	
Proteins, oils, serums, animal fats, and most types of organics	
Cage2Wash 1 Application Guide	
Automated wash, spray, soak, and manual applications	
Cage2Wash 1 Industry Uses	
All types of animal housing and accessories and all process and laboratory equipment. Designed specifically for lab animal research facilities and for removal of moderate to heavy soil build-up.	

Order Number	*Description*	*Qty/Cs*
C-1-1G-01	Cage2Wash 1, 1 Gallon, Non-Sterile	4
C-1-5G-01	Cage2Wash 1, 5 Gallon Drum, Non-Sterile	1
C-1-30G-01	Cage2Wash 1, 30 Gallon Drum, Non-Sterile	1
C-1-55G-01	Cage2Wash 1, 55 Gallon Drum, Non-Sterile	1
C-1-275G-01	Cage2Wash 1, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

CAGE2WASH two

Cage2Wash 2 Enhanced Alkaline Detergent is a concentrated, high performance alkaline cleaning agent designed for both mechanical and manual cleaning applications. Cage2Wash 2 is formulated with a dual surfactant system and other critically essential cleaning ingredients including high levels of chelating agents that make this product an ideal detergent in all water conditions. This product is a low foaming cleaning agent (at all temperatures) and has enhanced cleaning ability to rinse free from systems.

Cage2Wash 2 Enhanced Alkaline Detergent Specifications	
Characteristic	Mild alkaline
Detergency	Excellent
Appearance	Colorless
Clarity	Clear
Odor	Slight
Specific Gravity	1.000 - 1.200
pH (1% solution)	10.2 - 12.2
Foaming	Low foaming
Storage Recommendation	Ambient
Conductivity (1% @ 21°C)	0.05 - 2.00 mS
Phosphate Free	Yes
P Content	0.00%
N Content	0.00%
Cage2Wash 2 Material Compatibility At Recommended Use Dilutions	
Stainless steel, aluminum, copper, galvanized steel, soft metals, glass, polypropylene, polycarbonates, polysulfone, polyetherimide, plexiglass, and a wide variety of plastics	
Cage2Wash 2 Cleaning Residue Specialties	
Proteins, silicones, oils, petrolatum, polymers, serums, urine scales, animal fats, and most all types of organics	
Cage2Wash 2 Application Guide	
Mechanical, soak, and manual applications	
Cage2Wash 2 Industry Uses	
All hard water conditions, all animal housing, and all accessories. Ideal for rodent cage cleaning and environmental cleaning applications.	

Order Number	*Description*	*Qty/Cs*
C-2-1G-01	Cage2Wash 2, 1 Gallon, Non-Sterile	4
C-2-5G-01	Cage2Wash 2, 5 Gallon Drum, Non-Sterile	1
C-2-30G-01	Cage2Wash 2, 30 Gallon Drum, Non-Sterile	1
C-2-55G-01	Cage2Wash 2, 55 Gallon Drum, Non-Sterile	1
C-2-275G-01	Cage2Wash 2, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

C-2-1G-01


C-2-5G-01


C-2-55G-01


C-2-275G-01

CAGE2WASH three

C-3-1G-01


C-3-5G-01


C-3-30G-01


C-3-275G-01

Cage2Wash 3 Acid Based Detergent is a high performance concentrated phosphoric acid liquid cleaning agent designed specifically for automation equipment cleaning requirements. Cage2Wash 3 is formulated with phosphoric acid, surfactants and other critically essential cleaning ingredients. This product is a low foaming cleaning agent (at all temperatures) and has enhanced cleaning ability to rinse free from systems. Routine use of this product reduces corrosion, putting, and rusting.

Cage2Wash 3 Acid Based Detergent Specifications	
Characteristic	Acidic
Detergency	Excellent
Color	Colorless
Clarity	Clear
Odor	Slight odor
Specific Gravity	1.170 - 1.370
pH (1% solution)	0.86 - 2.86
Foaming	Low foaming
Storage Recommendation	Ambient
Conductivity (1% @ 21°C)	5.1-9.1 mS
Phosphate Free	No
P Content	29.7%
N Content	0.00%
Cage2Wash 3 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass-enamel, glass, polycarbonate, polysulfone, polyetherimide, plexiglass, aluminum, plastics, and most elastomers	
Cage2Wash 3 Cleaning Residue Specialties	
Inorganic salts, water scales, particulate carbon, urine scales, silicones, oils, petrolatum, polymers, and most all types of inorganics	
Cage2Wash 3 Application Guide	
Mechanical, soak, automated washes, spray systems	
Cage2Wash 3 Industry Uses	
For removal of moderate to heavy buildup of inorganic soils, animal buildup, and water scale buildup. Reduces corrosion, pitting, and rusting on all animal housing and accessories.	

Order Number	*Description*	*Qty/Cs*
C-3-1G-01	Cage2Wash 3, 1 Gallon, Non-Sterile	4
C-3-5G-01	Cage2Wash 3, 5 Gallon Drum, Non-Sterile	1
C-3-30G-01	Cage2Wash 3, 30 Gallon Drum, Non-Sterile	1
C-3-55G-01	Cage2Wash 3, 55 Gallon Drum, Non-Sterile	1
C-3-275G-01	Cage2Wash 3, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

CAGE2WASH four

Cage2Wash 4 Hydroxyacetic Acid Detergent is a high performance concentrated hydroxyacetic acid cleaner/descaler liquid cleaning agent designed specifically for automation cleaning requirements. Cage2Wash 4 is formulated with glycolic acid, surfactants and other critically essential cleaning ingredients. This product is a non-foaming cleaning agent (at all temperatures) and has enhanced cleaning ability to rinse free from systems. Routine use of this product is helpful in the removal of free metals and reduces corrosion, putting, and rusting.

Cage2Wash 4 Hydroxyacetic Acid Cleaner Specifications	
Characteristic	Acidic
Detergency	Excellent
Color	Clear - pale yellow
Clarity	Clear
Odor	Slight odor
Specific Gravity	1.020 - 1.220
pH (1% solution)	1.67- 3.67
Foaming	Minimal to none
Storage Recommendation	Ambient
Phosphate Free	Yes
P Content	0.00%
N Content	0.00%
Cage2Wash 4 Material Compatibility At Recommended Use Dilutions	
Stainless steel, glass, polycarbonate, polysulfone, polyetherimide, plexiglass, aluminum, and most elastomers	
Cage2Wash 4 Cleaning Residue Specialties	
Inorganic salts, scales, particulate carbon, proteins, urine scale (on polycarbonate, stainless, and other caging materials), water scales, free metals, excipients, fine chemicals, silicones, oils, petrolatum, and most types of inorganics	
Cage2Wash 4 Application Guide	
Soak, manual, automated washers, spray systems, and both CIP and COP applications	
Cage2Wash 4 Industry Use	
Phosphate free removal of inorganic compounds found in animal research facilities, and on all types of animal housing and accessories. Reduces corrosion, pitting, and rusting and helps maintain equipment integrity.	

Order Number	*Description*	*Qty/Cs*
C-4-1G-01	Cage2Wash 4, 1 Gallon, Non-Sterile	4
C-4-5G-01	Cage2Wash 4, 5 Gallon Drum, Non-Sterile	1
C-4-30G-01	Cage2Wash 4, 30 Gallon Drum, Non-Sterile	1
C-4-55G-01	Cage2Wash 4, 55 Gallon Drum, Non-Sterile	1
C-4-275G-01	Cage2Wash 4, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

C-4-1G-01


C-4-5G-01


C-4-30G-01


C-4-275G-01

CAGE2WASH five

C-5-1G-01


C-5-5G-01


C-5-30G-01


C-5-275G-01

Cage2Wash 5 Citric Acid Cleaner Detergent/De-Scaler is a high performance concentrated liquid citric acid cleaner/descaler cleaning agent designed specifically for automation, soak, and prep cleaning requirements. Cage2Wash 5 is formulated with citric acid and a unique dual surfactant system with other critically essential cleaning ingredients. This product is a low foaming cleaning agent (at all temperatures) and has enhanced cleaning ability to rinse free from all systems. This stand alone cleaner can be used in all water conditions.

Cage2Wash 5 Citric Acid Cleaner and De-Scaler Detergent Specifications	
Characteristic	Acidic
Detergency	Excellent
Color	Colorless to light straw
Clarity	Clear
Odor	Acidic
Specific Gravity	1.040 - 1.240
pH (1% solution)	1.93 - 3.93
Foaming	Low foaming
Storage Recommendation	Ambient
Phosphate Free	Yes
P Content	0.00%
N Content	0.00%
Cage2Wash 5 Material Compatibility At Recommended Use Dilutions	
Stainless steel, soft metals, assorted polymers (caging materials), galvanized steel, aluminum, polypropylene, polycarbonate, polysulfone, polyetherimide, plexiglass, glass, and a wide variety of plastics	
Cage2Wash 5 Cleaning Residue Specialties	
Inorganic salts, water scales, proteins, particlate carbon, uric scales, animal fats, oils, and most all types of inorganics	
Cage2Wash 5 Application Guide	
Recirculation, automation, soak, spray, manual, mechanical	
Cage2Wash 5 Industry Use	
For fast removal of tough uric stone build-up for effective pre-cleaning of animal cages. Greatly minimizes cleaning prep time. Ideal stand alone cleaner for most all tunnel wash applications. Excellent choice for cage and rack washer equipment. For use in all water conditions. Routine use reduces corrosion, putting, and rusting.	

Order Number	*Description*	*Qty/Cs*
C-5-1G-01	Cage2Wash 5, 1 Gallon, Non-Sterile	4
C-5-5G-01	Cage2Wash 5, 5 Gallon Drum, Non-Sterile	1
C-5-30G-01	Cage2Wash 5, 30 Gallon Drum, Non-Sterile	1
C-5-55G-01	Cage2Wash 5, 55 Gallon Drum, Non-Sterile	1
C-5-275G-01	Cage2Wash 5, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

CAGE2WASH N

Cage2Wash N Alkaline Based Neutralizer is a highly concentrated liquid alkaline based neutralizing agent used to raise solution pH, and is specifically designed for all types of effluent treatment. It is used to neutralize acidic solutions and allow for permissible effluent compliance where pH ranges are established. Cage2Wash N is phosphate free and non-foaming. The concentrated formula minimizes the actual use dilution for low cost per use.

Cage2Wash N Alkaline Based Neutralizer Specifications	
Characteristic	Alkaline
Detergency	Low-moderate
Appearance	Clear to opaque
Odor	Odorless
pH (1% solution)	13.5-14.1
Foaming	Non-foaming
Storage Recommendation	Ambient
Phosphate Free	Yes
P Content	0.00%
N Content	0.00%
Cage2Wash N Application Guide	
Effluent pH balancing and automatic cleaning. Safe for use on all stainless steel surfaces.	
Cage2Wash N Industry Use	
Used wherever pH adjustment is needed; raises solution pH to neutralize acidic solutions for permissible effluent compliance. Concentrate use dilution will be condition on the pH desired and the solution "soil" to be adjusted.	

Order Number	*Description*	*Qty/Cs*
C-N-1G-01	Cage2Wash N, 1 Gallon, Non-Sterile	4
C-N-5G-01	Cage2Wash N, 5 Gallon Drum, Non-Sterile	1
C-N-30G-01	Cage2Wash N, 30 Gallon Drum, Non-Sterile	1
C-N-55G-01	Cage2Wash N, 55 Gallon Drum, Non-Sterile	1
C-N-275G-01	Cage2Wash N, 275 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package

All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

C-N-1G-01


C-N-5G-01


C-N-30G-01


C-N-275G-01

DECON-QUAT® 200V

Veterinary Quaternary Ammonium Disinfectant

DQ200V-1G-01

DQ200V-5G-01

DQ200V-30G-01

DECON-QUAT 200V is an EPA registered veterinary disinfectant, virucide, and fungicide that is proven to be effective against a wide array of organisms when used as directed. The verified results provide an added level of quality assurance to your overall cleaning and disinfection program. DECON-QUAT 200V is manufactured and tested from beginning to end in an EPA registered manufacturing facility, and meets the highest standards in manufacturing and processing. This assures the highest level of quality and integrity of the final product. Lot specific analysis is available and the product is fully traceable.

Disinfectant - Virucide* - Sanitizer - Germicidal Detergent - Deodorant - Fungicide - Cleaner - Mildewstat.
* When used as directed.

DECON-QUAT 200V is a neutral 5th generation pH quaternary ammonium solution. It is non-corrosive to most all substrates at recommended use dilution. Pitting and corrosion is often the result of other aggressive decontamination agents. That corrosion may lead to harborage of organisms that may adversely affect your overall cleaning program.

The highly concentrated formula has a very low cost per use. Actual use dilution is dependent upon the decontamination requirements of the specific organisms present. For example, efficacy can be achieved as low as 660 ppm active or 1/2 ounce per gallon of water for most broad spectrum claims, animal virucidal claims, and fungicidal claims. For Canine Parvovirus and Rabies claims, 2.25 ounces of DECON-QUAT 200V per gallon of water with a 10 minute contact time is required.

DECON-QUAT 200V can be used in the life science and research and development industries as well as the following applications: veterinary, dairy, equine, poultry plants, poultry/turkey farms, institutional, and industrial use.

DECON-QUAT 200V Neutral pH Quaternary Ammonium Disinfectant/Cleaner	
Liquid Appearance	Clear, colorless to straw liquid
Specific Gravity	0.95-1.10
pH @ 1% Solution (normal)	6.00-10.50
Foaming	Moderate
Rinsing	Excellent
Viscosity @ 22°C, 71.6°F	13.6 mm^2/s

Order Number	*Description*	*Qty/Cs*
DQ200V-1G-01	DECON-QUAT 200V, 1 Gallon, Non-Sterile	4
DQ200V-5G-01	DECON-QUAT 200V, 5 Gallon Drum, Non-Sterile	1
DQ200V-30G-01	DECON-QUAT 200V, 30 Gallon Drum, Non-Sterile	1

Lot Specific Documentation Package
All product is lot traceable and delivered each time with the lot specific certification. All lots are traced through the master batch records.

Welcome to ECMD

Environmental Control Monitoring Division

VAI's Environmental Control Monitoring Division (ECMD) addresses the needs of the pharmaceutical, biotechnology, semiconductor, and electronics industries with a complete range of Environmental Monitoring Equipment.

VAI's Viable Air Monitoring Equipment is designed to sample a quantifiable amount of air for viable contamination using our patented Sterilizable Microbial Atrium (SMA®) and a standard media plate. A SMA Atrium® is a 316L Stainless Steel capture device that is connected to a controlled vacuum source, such as the SMA OneTouch® ICS. Air is directed from the environment to impact onto a media plate contained inside of the Atrium. The media plate is then incubated and tested to determine the number of viable organisms per cubic foot or liter of air. The SMA Atrium is compatible with the following equipment:

- SMA OneTouch® ICS – Computerized air monitoring system featuring a touchscreen interface
- SMA MicroPortable® Air Sampler – Battery powered, lightweight, and portable air monitoring system
- SMA® Compressed Air/Gas Sampler – Battery powered sampler for compressed air and gas
- SMA OneTouch® Command Systems – Features SMA® Digital Display Control Centers (DDC) and SMA OneTouch® Control Panels

The SMA OneTouch ICS and SMA OneTouch Command Systems allow you to manage different aspects of the sample cycle from within a controlled environment while locating the flow center and vacuum pump in a non-controlled environment. Isolator configurations are available which provide non-aspiration of possible contaminates from the exterior environment to the isolator system.

VAI also offers SMA MicroParticle ICS Particle Counters that are used for continuous or periodic monitoring of particle counts in cleanrooms and critical environments. SMA MicroParticle ICS Particle Counters are available in HandHeld, Table Top, and Wall Mounted Models. Remote Models are also available for integration into facility monitoring systems.

72-73 SMA Atrium®
74 SMA® Remote Atrium
75-76 SMA OneTouch® ICS
77 SMA MicroPortable® Air Samplers
78 SMA MicroPortable® ICS Air Samplers
79 SMA® Compressed Air/Gas Sampler
80 SMA® Compressed Air/Gas Atriums
81 SMA® Digital Display Control Centers (DDC)
82 SMA® DDC For Isolators
83 SMA OneTouch® Control Panels
83 SMA® Tubing
84 H-Y Tumble Drum®
85-87 SMA MicroParticle ICS™

SMA Atrium®

SMA Atriums® are stainless steel collection devices that connect to the SMA OneTouch® Integrated Control System (ICS), SMA® Digital Display Control Center (DDC), or SMA MicroPortable® Air Sampler. When partnered with one of these viable monitoring instruments the SMA Atriums direct air from the environment to impact onto a media plate. The media plate is then evaluated to determine the amount of viable contamination in the environment.

SMA Atriums are the preferred test method of pharmaceutical, biotechnology, semiconductor, and electronics organizations around the world for determining the level of viable contamination in their facilities.

SMA Atriums are available in multiple configurations, including a wall mountable configuration with a specifically designed bracket and Atrium base. The SMA Atrium Easy Grip top has a concave edge designed to make the Atrium easy to handle.

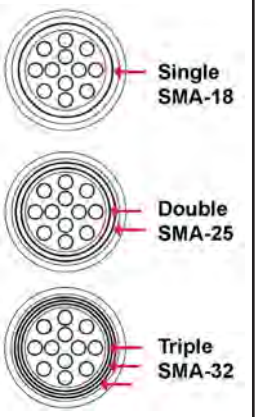
Features and Benefits

- Easily connected to SMA Viable Monitoring Equipment
- Constructed of 316L Stainless Steel
- Completely sterilized by steam, heat, or ethylene oxide (ETO)
- Used with standard media plates (90 or 100 mm) with 18, 25, or 32 mL fill levels
- Available with 1/4 or 1/2 inch sieve diameters
- Requires a vacuum source to operate
- Operate at an air flow of 1 CFM (28.3 LPM)
- Compact size allows the SMA Atriums to be located near critical filling processes where space is limited
- Non-turbulent design causes no disruption in unidirectional air flow, which allows placement in the most critical areas (e.g. RABS)
- Concave, easy to grip design

Selecting an SMA Atrium

It is critical to determine the desired sample time and plate exposure period. Extended periods of active sampling can cause desiccation and dehydration of the media plate, resulting in poor or no growth of microorganisms that may have been present in the air sample. The SMA Atrium allows for continuous, active sampling for up to 3 hours (or more), depending on the media plate fill level and selected Atrium top.

Use the following table to determine the correct SMA Atrium for your facility.

Exposure Time*	Plate Fill Level	Sieve Diameter	Air Flow	Assembly	Identification grooves underneath the Atrium Top
50 Minutes	18 mL	1/2 inch	1 CFM	SMA-EG-18-1/2	
90 Minutes	25 mL	1/2 inch	1 CFM	SMA-EG-25-1/2	
180 Minutes	32 mL	1/2 inch	1 CFM	SMA-EG-32-1/2	
50 Minutes	18 mL	1/4 inch	1 CFM	SMA-EG-18-1/4	
90 Minutes	25 mL	1/4 inch	1 CFM	SMA-EG-25-1/4	
120 Minutes	32 mL	1/4 inch	1 CFM	SMA-EG-32-1/4	
Sieve diameter is the size of the holes in the top of the Atrium. The sieve diameter affects the velocity of the air flow into the media plate. VAI offers 1/4 and 1/2 inch sieve diameters. The smaller, 1/4 inch, sieve diameter increases the speed at which the media plate desiccates. The larger, 1/2 inch, sieve diameter allows for a longer sampling period and offers the capacity of implementing a more continuous monitoring effort.					
* Exposure time is based on VAI's internal validation studies (available upon request) as well as customer based validation efforts.					

SMA Atrium® Ordering Information

Complete Assemblies

Order Number	*Description*
SMA-EG-18-1/2	SMA Atrium Assembly with Easy Grip top and 1/2'' diameter sieves for use with 18 mL filled media plates
SMA-EG-25-1/2	SMA Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 25 mL filled media plates
SMA-EG-32-1/2	SMA Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 32 mL filled media plates
SMA-EG-18-1/4	SMA Atrium Assembly with Easy Grip top and 1/4" diameter sieves for use with 18 mL filled media plates
SMA-EG-25-1/4	SMA Atrium Assembly with Easy Grip top and 1/4" diameter sieves for use with 25 mL filled media plates
SMA-EG-32-1/4	SMA Atrium Assembly with Easy Grip top and 1/4" diameter sieves for use with 32 mL filled media plates
SMA-EG-18-1/2-WATR*	SMA Wall Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 18 mL filled media plates
SMA-EG-25-1/2-WATR*	SMA Wall Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 25 mL filled media plates
SMA-EG-32-1/2-WATR*	SMA Wall Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 32 mL filled media plates
SMA-EG-25-D50	SMA D50 Atrium Assembly with Easy Grip top and .015" diameter sieves for use with 25 mL filled media plates. Designed for higher impaction and smaller particle size collection, D50 value.
SMA-EG-32-1/2-BO	SMA Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 32 mL filled media plates. Vacuum connection centrally located on the bottom of the base.
SMA-EG-32-1/2-LO	SMA Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 32 mL filled media plates. Limiting vacuum connection located on the side of the base.
SMA-EG-32-1/2-LO-BO	SMA Atrium Assembly with Easy Grip top and 1/2" diameter sieves for use with 32 mL filled media plates. Limiting vacuum connection centrally located on the bottom of the base.

All assemblies include a lid, top, base, and vacuum connection.

*Base is drilled and tapped for the wall bracket which is sold separately (SMA-WALLATR).

Bottom/Base Only

Order Number	*Description*
SMA-316-B-SNTRY150	SMA Atrium Bottom/Base Only, 316L Stainless Steel, Vacuum connection centrally located on the bottom of the base, Includes an integrated 1½" sanitary flange fitting.
SMA-316-B-SNTRY75	SMA Atrium Bottom/Base Only, 316L Stainless Steel, Vacuum connection centrally located on the bottom of the base, Includes an integrated .75" sanitary flange fitting.
SMA-316-B-SNTRY-D15	SMA Atrium Bottom/Base Only, 316L Stainless Steel, Vacuum connection centrally located on the bottom of the base, Includes an integrated metric (DIN15) sanitary flange fitting.

Accessories

Order Number	*Description*
SMA-WALLATR	SMA Atrium Wall Bracket, Wall Mountable, Removable, Includes Quick Disconnect fitting and mate, Valve seals automatically when disconnected, 316L Stainless Steel
SMA-316-ORIFICE-STD	Non-limiting vacuum connection for use with the base SMA-316-BOTTOM and 1/4" ID flexible tubing
SMA-LID-EG	Cover for SMA Atriums with Easy Grip feature, 316L Stainless Steel, Not to be used with Remote Atriums

Tops Only

Order Number	*Description*
SMA-EG-T-18-1/2	SMA Atrium Top with Easy Grip feature and 1/2" diameter sieves for use with 18 mL filled media plates
SMA-EG-T-25-1/2	SMA Atrium Top with Easy Grip feature and 1/2" diameter sieves for use with 25 mL filled media plates
SMA-EG-T-32-1/2	SMA Atrium Top with Easy Grip feature and 1/2" diameter sieves for use with 32 mL filled media plates
SMA-EG-T-18-1/4	SMA Atrium Top with Easy Grip feature and 1/4" diameter sieves for use with 18 mL filled media plates
SMA-EG-T-25-1/4	SMA Atrium Top with Easy Grip feature and 1/4" diameter sieves for use with 25 mL filled media plates
SMA-EG-T-32-1/4	SMA Atrium Top with Easy Grip feature and 1/4" diameter sieves for use with 32 mL filled media plates

SMA® Remote Atrium

SMA® Remote Atriums are designed to sample in places where the use of the standard SMA Atrium® is either impractical due to size and space limitations, or the actual procedure of replacing the media plate would interfere with the manufacturing process. The SMA Remote Atrium extension tube attaches to ¼ inch Hytrel® tubing.

SMA Remote Atriums can be used with VAI's Isokinetic Probe which provides a secure attachment point near the point of sample and improves air flow efficiency. The Isokinetic Probe and tubing can be located near critical filling processes where space is limited.

Features and Benefits

- Easily connected to SMA Viable Monitoring Equipment
- Constructed of 316L stainless steel
- Completely sterilized by steam, heat, or ethylene oxide (ETO)
- Used with standard media plates (90 or 100 mm) with 18, 25, or 32 mL fill levels
- Requires a vacuum source to operate
- Operate at an air flow of 1 CFM (28.3 LPM)

Complete Assemblies

Order Number	*Description*
SMA-316-RE-18	SMA Remote Atrium Assembly for use with 18 mL filled media plates, 316L Stainless Steel
SMA-316-RE-25	SMA Remote Atrium Assembly for use with 25 mL filled media plates, 316L Stainless Steel
SMA-316-RE-32	SMA Remote Atrium Assembly for use with 32 mL filled media plates, 316L Stainless Steel

Top Only

Order Number	*Description*
SMA-316-RE-TO-18	SMA Remote Atrium Top for use with 18 mL filled media plates, 316L Stainless Steel
SMA-316-RE-TO-25	SMA Remote Atrium Top for use with 25 mL filled media plates, 316L Stainless Steel
SMA-316-RE-TO-32	SMA Remote Atrium Top for use with 32 mL filled media plates, 316L Stainless Steel

Accessories

Order Number	*Description*
SMA-ISO-PROBE-1/4	Isokinetic Probe with 1/4" Hose Connection, 316L Stainless Steel

Isokinetic Probe
SMA-ISO-PROBE-1/4

Complete Assembly
SMA-316-RE-25

Top Only
SMA-316-RE-TO-25

Base Only
SMA-316-BOTTOM

SMA OneTouch® ICS

The SMA OneTouch® Integrated Control System (ICS) is a computerized, automated viable air monitoring system that controls calibrated, precise air sampling through individual or multiple SMA Atriums®. SMA Atriums are stainless steel collection devices that direct air from the environment to impact onto a media plate. The media plate is then evaluated to determine the amount of viable contamination in the air sample.

The SMA OneTouch ICS strictly regulates the air flow rate throughout a sample cycle. The system automatically alarms the operator visually and audibly if the sample becomes compromised or is aborted. In addition, the SMA OneTouch ICS continuously monitors the air flow rate while sampling and will alert the operator if the flow rate deviates from the established 1 Cubic Feet per Minute (CFM) flow rate.

The SMA OneTouch ICS has a touchscreen interface that incorporates facility floor plans and SMA Atrium locations for sample monitoring. User accounts have access levels which limit their access to specific functionality.

VAI also offers the SMA OneTouch ICS for Isolators. This SMA OneTouch ICS configuration includes all the aforementioned benefits and provides secure sampling inside the isolator environment.

Product Uses

- Program, start, abort, and monitor all sampling through integrated SMA Atriums
- Monitors all sample parameters (e.g. sample volume, sample duration, and vacuum pump status)
- Provides visual indication of all activity throughout the sampling process
- Immediate audible and visual alarms will sound if the sample is compromised or aborted

Features and Benefits

- Installation requires minimal tubing and wiring which simplifies installation into new and existing facilities
- Integrated with existing facility monitoring and data collection systems using industry standard networking
- Provides system-wide viable monitoring capabilities from a single interface
- Remotely monitored using a variety of handheld, tablet, and computer-based devices

SMA OneTouch ICS Components

The SMA OneTouch ICS comes as a complete assembly that includes: Interface, Flow Center, Controller, and Vacuum components (if ordering SMA OneTouch ICS for isolators, an Isolator Flow Center).

The SMA OneTouch ICS Interface is a touch screen that is used to monitor and control the SMA OneTouch ICS and all integrated SMA Atriums.

The SMA OneTouch ICS Controller is a computerized system which incorporates a Programmable Logic Controller (PLC) and powers the Interface and Flow Center. It automates all system monitoring, sampling, and alarming functions.

The SMA OneTouch ICS Flow Center contains a series of high accuracy mass-flow controllers (1.0 CFM ± 2%) that automatically regulate the air flow on each sampling line.

VAI offers on-site calibration and repair services. Please contact us for details.

SMA OneTouch® ICS Ordering Information

SMA OneTouch ICS Complete Assemblies

Order Number	*Description*
SMA-ICS-1-A	SMA OneTouch ICS, 1 Sampling Location, 6.5" Interface
SMA-ICS-2-A	SMA OneTouch ICS, 2 Sampling Locations, 6.5" Interface
SMA-ICS-4-A	SMA OneTouch ICS, 4 Sampling Locations, 10" Interface
SMA-ICS-6-A	SMA OneTouch ICS, 6 Sampling Locations, 10" Interface
SMA-ICS-8-A	SMA OneTouch ICS, 8 Sampling Locations, 15" Interface
SMA-ICS-10-A	SMA OneTouch ICS, 10 Sampling Locations, 15" Interface

Available in local voltage requirements.

Isolator Systems Complete Assemblies

Order Number	*Description*
SMA-ICS-1I-A	SMA OneTouch ICS for Isolators, 1 Sampling Location, 6.5" Interface
SMA-ICS-2I-A	SMA OneTouch ICS for Isolators, 2 Sampling Locations, 6.5" Interface
SMA-ICS-4I-A	SMA OneTouch ICS for Isolators, 4 Sampling Locations, 10" Interface
SMA-ICS-6I-A	SMA OneTouch ICS for Isolators, 6 Sampling Locations, 10" Interface
SMA-ICS-8I-A	SMA OneTouch ICS for Isolators, 8 Sampling Locations, 15" Interface
SMA-ICS-10I-A	SMA OneTouch ICS for Isolators, 10 Sampling Locations, 15"Interface

Available in local voltage requirements.

SMA MicroPortable® Air Samplers

SMA-P300-03

SMA-P191-03

SMA MicroPortable® Air Samplers are used for the automated collection of microorganisms in the air. These viable air samplers are battery powered, compact, and lightweight which allows them to be easily moved to desired air sampling points. They also make it easy to start and cancel a sample cycle.

SMA MicroPortable Air Samplers incorporate the same multi-orifice sampling methods as the standard SMA Atrium which allows continuous viable air sampling. Furthermore, they allow you to program, save, recall, and view two sample volume amounts and view air flow in Cubic Feet per Minute (CFM) or Liters Per Minute (LPM).

Product Uses

- Program, save, recall, and view two sample volume amounts
- Start and cancel a sample cycle
- Provide visual notification
    - When the sample cycle is in progress
    - Which preset sample volume is selected
    - Which air flow rate is selected, 1 CFM or 5 CFM
    - When the battery requires charging
- Provide audible and visual alarms when the sample cycle is complete

Features and Benefits

- Constructed with 316L Stainless Steel
- Disinfect using select VAI products
- SMA Atriums can be completely sterilized by steam, heat, or ethylene oxide (ETO)
- Battery powered and can operate for 8 hours before requiring a 45 minute recharge
- Meets North American (ETL) and European Community (CE) safety standards
- Includes a battery, battery charger, cover, SMA Atrium top (1/4" 25 mL), and lid

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-P201-03	SMA MicroPortable Air Sampler, 316L Stainless Steel Housing, 1 and 5 CFM Selectable Flow Rates
SMA-P191-03	SMA MicroPortable Air Sampler (Lightweight Version), Delrin® Top & Bottom, 1 and 5 CFM Selectable Flow Rates
SMA-P300-03	SMA MicroPortable Air Sampler ("Explosion Proof" Version), 316L Stainless Steel Housing, 1 and 5 CFM Selectable Flow Rates, For Use In Hazardous Environments
SMA-PXXX-BATTERY	Additional NiMH Battery For SMA-P191, SMA-P201, and SMA-P300 SMA MicroPortable Air Samplers
SMA-PXXX-BC-01	Additional Battery Charger For SMA-P191, SMA-P201, and SMA-P300 SMA MicroPortable Air Samplers (North America Only)
SMA-PXXX-BC-02	Additional Battery Charger for SMA-P191, SMA-P201, and SMA-P300 SMA MicroPortable Air Samplers (International)
SMA-HARDCASE	Air Transport Association (ATA) Style Transportation Case for SMA MicroPortable Air Samplers
SMA-PXXX-CALKIT	Calibration Kit For SMA MicroPortable Air Samplers

SMA MicroPortable ICS®

SMA-ICSMP-01

The SMA MicroPortable ICS is a viable air sampler for use in critical or non-controlled environments. The SMA MicroPortable ICS is a sieve impactor that accurately regulates a specified amount of air through a perforated lid. The air impacts on the surface of a media plate that is incubated to detect microbial growth.

The SMA MicroPortable ICS sampler utilizes either our SMA Atrium for sampling times as long as 3 hours or the SMA Atrium D50 high efficiency impaction head which allows for sampling a cubic meter of air in 7 minutes. The SMA Atrium can be sterilized by steam, heat, or ethylene oxide (ETO).

The SMA MicroPortable ICS is battery powered, compact, and lightweight which allows it to be easily moved to desired sampling points. Settings including but not limited to flow rate, sample mode, audio alarms, and units of measure, can be configured in the settings screen.

The SMA MicroPortable ICS utilizes a high accuracy mass flow controller that regulates airflow to ensure an accurate volume of air is sampled each time. If the flow rate deviates beyond the acceptable limits, the system alarms to alert the operator. The system also monitors and indicates a variety of operational parameters including the sample volume and elapsed time.

The SMA MicroPortable can be used on a network and remotely accessed by operators and administrators. The system provides the option to view the interface and operate the device via web browser or remote desktop. The system will also allow the operator to download historical data to a USB flash drive.

SMA-ICSMP-ATRIUM-1/2

Features and Benefits

- Adjustable media plate mounting system for different sized plates, which allows user to make adjustments for plate size fluctuations between media manufacturers
- Large icon drive touchscreen allows easy access to system functions, even by gloved users inside manufacturing environments
- Allows for use in both vertical and horizontal orientation, therefore, minimizing the disruption to laminar flow
- Constructed to allow the most stringent disinfection regime on the device without affecting the construction or performance of the sampler, thus reducing the risk of contamination to the cleanroom
- The MODBUS/PROFIBUS connectivity provides the ability to automatically integrate data (bi-directional) with LIMS/SCADA/FMS system without a hardware/software interpretation step, so time and money associated with building an interface is saved
- Can be monitored and controlled by the SMA OneTouch® ICS which centralizes the control of multiple SMA Atriums from a single location, providing convenience and time savings

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-ICSMP-01	SMA MicroPortable ICS Air Sampler, Touchscreen Display, 1, 2, and 5 CFM Selectable Flow Rates
SMA-ICSMP-CHGR	Additional Battery Charger for SMA MicroPortable
SMA-ICSMP-BAT	Additional Lithium-Ion Battery for SMA MicroPortable
SMA-ICSMP-ATRIUM-1/2	Locking SMA Atrium Top with Easy Grip feature and 1/2" diameter sieves for use with 18 mL filled media plates, 316L Stainless Steel, Locking mechanism attaches the SMA Atrium to the SMA MicroPortable ICS
SMA-ICSMP-ATRIUM -1/4	Locking SMA Atrium Top with Easy Grip feature and 1/4" diameter sieves for use with 18 mL filled media plates, 316L Stainless Steel, Locking mechanism attaches the SMA Atrium to the SMA MicroPortable ICS
SMA-ICSMP-ATRIUM -D50	Locking SMA Atrium Top with Easy Grip feature and .015" diameter sieves for use with 25 mL filled media plates, 316L Stainless Steel, Locking mechanism attaches the SMA Atrium to the SMA MicroPortable ICS Air Sampler, Designed for higher impaction and smaller particle size collection, D50 value
SMA-ICSMP-CASE	Air Transport Association (ATA) Style Transportation Case for SMA MicroPortable ICS

SMA® Compressed Air/Gas Sampler

The SMA® Compressed Air/Gas Sampler is used for the automated collection of microorganisms in compressed air and gas lines. It monitors and regulates air flow, has a programmable timer, and can sample compressed air/gas lines up to 100 psi at 1 Cubic Feet per Minute (CFM). The instrument can sample compressed air, nitrogen, carbon dioxide, and argon. Contact VAI before sampling any other gases (e.g. oxygen).

The SMA Compressed Air/Gas Sampler incorporates the same multi-orifice sampling methods as the standard SMA Atrium that allows continuous monitoring of compressed air/gas lines. The instrument has a safety mechanism that releases pressure when incoming gas pressure exceeds 100 psi. Furthermore, it allows you to view air flow in CFM or Liters Per Minute (LPM).

SMA-CA201

SMA-CA2XX-GASKET-B

SMA-CA2XX-PHOSE

SMA-CA201-BC-01

Product Uses

- Program and view a sample time
- Start and cancel a sample cycle
- Monitor and control air flow
- Release pressure before opening the sampling head
- Provide visual notification when the
  - -Sample cycle is in progress
  - -Sampling head is under pressure
  - -Sample complete audible alarm is enabled
  - -Battery requires charging
- Provide audible and visual alarms when
  - -The sample cycle is complete
  - -There is a 1 CFM error during a sample cycle

Features and Benefits

- Sampling head and hose can be completely sterilized by steam, heat, or ethylene oxide (ETO)
- Disinfect using select VAI® products
- Meets North American (ETL) and European Community (CE) safety standards
- Includes a battery, battery charger, gasket, stainless steel pressure hose, and 0.2 micron filter

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-CA201	SMA Compressed Air/Gas Sampler, Automated, Digital Display
SMA-CA201-BATTERY	Additional Battery, NiMH, 24V, For SMA Compressed Air/Gas Sampler, SMA-CA201
SMA-CA201-BC-01	Additional Battery Charger, For SMA Compressed Air/Gas Sampler, SMA-CA201 (North America)
SMA-CA201-BC-02	Additional Battery Charger, For SMA Compressed Air/Gas Sampler, SMA-CA201 (International)
SMA-CA2XX-PHOSE	Additional Braided Stainless Steel Pressure Hose, For SMA Compressed Air/Gas Samplers, SMA-CA200 and SMA- CA201
SMA-CA2XX-GASKET-B	Replacement Gasket, For SMA Compressed Air/Gas Samplers, SMA-CA200 and SMA-CA201 (Buna-N)
SMA-CA2XX-GASKET-V	Replacement Gasket, For SMA Compressed Air/Gas Samplers, SMA-CA200 and SMA-CA201 (Viton)

SMA® Compressed Air/Gas Atriums

SMA-316-CA-18

SMA-ROT-SS-60C
(pictured with optional stand)

SMA® Compressed Air/Gas Atriums are used for the manual collection of microorganisms in compressed air/gas lines. Air flow calibration and timing must be performed manually using separate instruments. To regulate air flow, install a pressure regulator valve at the point of sample or use our SMA-ROT-SS-60C rotameter.

Features and Benefits

- Easily connected to sample points with sterile 1/4 inch Hytrel® tubing
- Constructed of 316L Stainless Steel
- Completely sterilized by steam, heat, or ethylene oxide (ETO)
- Used with standard media plates (90 or 100 mm) with 18, 25, or 32 mL fill levels, at a flow rate of 1-1.5 CFM
- Does not require a vacuum source to operate
- Vacuum connection air is released from underneath the Atrium without affecting the sample in progress
- Compact size allows them to be located near filling processes where space is limited
- Available as a complete top and bottom assembly
- Vents from the bottom which eliminates the need for additional vacuum connection ports or tubing

Order Number	*Description*
SMA-316-CA-18	SMA Compressed Air/Gas Atrium, 316L Stainless Steel, Use With 18 mL Filled Media Plates (Complete Assembly)
SMA-316-CA-25	SMA Compressed Air/Gas Atrium, 316L Stainless Steel, Use With 25 mL Filled Media Plates (Complete Assembly)
SMA-316-CA-32	SMA Compressed Air/Gas Atrium, 316L Stainless Steel, Use With 32 mL Filled Media Plates (Complete Assembly)
SMA-ROT-SS-60C	Matheson FM-1000 Series Flowmeter (J860), 0-90 SCFH (0 - 1.5 CFM), For Use With Compressed Air/Gas Atriums (SMA-316-CA-XX)

SMA® Digital Display Control Centers (DDC)

SMA Digital Display Control Centers (DDC) are used to control calibrated and timed vacuum sequences to individual or multiple SMA Atriums®. In addition, the DDC provides strict regulation of air flow (1 CFM) and will visually and audibly alarm the operator if the proper air flow is not maintained.

SMA DDCs can be used in conjunction with SMA OneTouch® Control Panels. These devices allow you to manage different aspects of the sample cycle from within a controlled environment while locating the DDC and vacuum pump in a non-controlled environment.

SMA-DDC-1

SMA-DDC-2

SMA-DDC-3

SMA-DDC-5-5

SMA-DDC-10

Product Uses

- Program and view a sample time
- Start and cancel a sample cycle
- Monitor and control air flow
- Provide visual notification when the sample cycle is in progress
- Provide audible and visual alarms when
  - The sample cycle is complete
  - There is a 1 CFM error

Features and Benefits

- Easily connected to SMA OneTouch Control Panels and SMA Atriums
- Cabinets are constructed of 304 Stainless Steel
- Disinfect using select VAI products
- Connect to an external facility control system (e.g. SCADA)
- Meets North American (ETL) and European Community (CE) safety standards
- Available with 1, 2, 3, 5, or 10 sampling locations

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-DDC-1	SMA Digital Display Control Center, One Location, Includes Pump (Internal)
SMA-DDC-2	SMA Digital Display Control Center, Two Locations, Includes Pump (External)
SMA-DDC-3	SMA Digital Display Control Center, Three Locations, Includes Pump (External)
SMA-DDC-5-5	SMA Digital Display Control Center, Five Locations, Includes Pump (External)
SMA-DDC-10	SMA Digital Display Control Center, Ten Locations, Includes Pump (External)

Available in local voltage requirements.

SMA® Digital Display Control Centers (DDC) For Isolators

SMA-DDC-1I

SMA-DDC-2I

SMA-DDC-3I

SMA-DDC-5-5I

SMA-DDC-10I

SMA Digital Display Control Centers (DDC) for Isolators are used to control calibrated and timed vacuum sequences to individual or multiple SMA Atriums within an isolator system. In addition, the DDCs for Isolators provide strict regulation of airflow (1 Cubic Feet per Meter) and will visually and audibly alarm the operator if the proper air flow is not maintained. DDCs for Isolators assure the non-aspiration or return of possible contaminates from the exterior environment to the isolator system by providing connections for a purge pump.

DDCs for Isolators can be used in conjunction with SMA OneTouch® Control Panels. These devices allow you to manage different aspects of the sample cycle from within a controlled environment while locating the DDC and vacuum pump in a non-controlled environment.

Product Uses

- Program and view a sample time
- Start and cancel a sample cycle
- Monitor and control airflow
- Provide visual notification when the sample cycle is in progress
- Provide audible and visual alarms when
  - The sample cycle is complete
  - There is a 1 CFM error

Features and Benefits

- Easily connected to SMA OneTouch Control Panels and SMA Atriums
- Cabinets are constructed of 304 Stainless Steel
- Disinfect using select VAI® products
- Connect to an external facility control system (e.g. SCADA)
- Meets North American (ETL) and European Community (CE) safety standards
- Available with 1, 2, 3, 5, or 10 sampling locations

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-DDC-1I	SMA Digital Display Control Center For Isolators, One Location, Includes Pump (Internal)
SMA-DDC-2I	SMA Digital Display Control Center For Isolators, Two Locations, Includes Pump (External)
SMA-DDC-3I	SMA Digital Display Control Center For Isolators, Three Locations, Includes Pump (External)
SMA-DDC-5-5I	SMA Digital Display Control Center For Isolators, Five Locations, Includes Pump (External)
SMA-DDC-10I	SMA Digital Display Control Center For Isolators, Ten Locations, Includes Pump (External)

Available in local voltage requirements.

SMA OneTouch® Control Panels

SMA OneTouch Control Panels are used in conjunction with SMA Digital Display Control Centers and SMA Atriums. SMA OneTouch Control Panels allow you to start, stop, and monitor the sample cycle from within a controlled environment while locating the SMA Digital Display Control Center and vacuum pump in a non-controlled environment.

Product Uses

- Program and view a sample time
- Start and cancel a sample cycle
- Provide visual notification when the
  - Sample cycle is in progress
  - Vacuum is present and functioning correctly
  - Sample complete and 1 CFM audible alarms are enabled
- Provide audible and visual alarms when
  - The sample cycle is complete
  - There is no vacuum present
  - There is a 1 CFM error

Features and Benefits

- Easily connected to a SMA Digital Display Control Center
- Constructed with a Stainless Steel bezel and clear PVC laminate face that are completely sealed for disinfection purposes
- Disinfect using select VAI® products
- Allows sampling from multiple Atriums simultaneously or independently
- Meets North American (ETL) and European Community (CE) safety standards
- Available with controls for 1, 2, 3, or 5 Atrium sampling sites

VAI offers on-site calibration and repair services. Please contact us for details.

Order Number	*Description*
SMA-OT-04-101	SMA OneTouch Control Panel, One Location, Flush Mount
SMA-OT-04-102	SMA OneTouch Control Panel, Two Locations, Flush Mount
SMA-OT-04-103	SMA OneTouch Control Panel, Three Locations, Flush Mount
SMA-OT-04-105	SMA OneTouch Control Panel, Five Locations, Flush Mount

SMA-OT-04-101

SMA-OT-04-102

SMA-OT-04-103

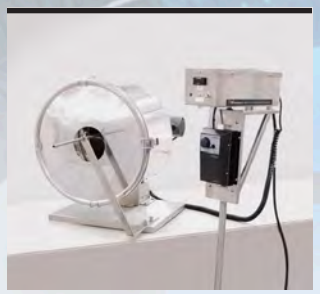
SMA-OT-04-105

SMA® Tubing

VAI® offers Vardex® and Hytrel® tubing and connectors. Hytrel tubing is used for straight runs and Vardex is used for angles. Both are available in 1 foot sections or 100 foot rolls.

Order Number	*Description*
SMA-VH-1/4	Hytrel Tubing, 1/4" ID, 1' Length
SMA-VH-1/4-ROLL	Hytrel Tubing, 1/4" ID, 100' Roll
SMA-VH-3/8	Hytrel Tubing, 3/8" ID, 1' Length
SMA-VH-3/8-ROLL	Hytrel Tubing, 3/8" ID, 100' Roll
SMA-VAR-3/8	Vardex Tubing, 3/8" ID, 1' Length
SMA-VAR-3/8-ROLL	Vardex Tubing, 3/8" ID, 100' Roll
SMA-VARVH	Connector For Hytrel To Vardex Tubing

H-Y Tumble Drum®



HYEDR-100

HYE-101

VAI's Environmental Control Monitoring Division (ECMD) has addressed the needs of cleanroom laundries, and the pharmaceutical, biotechnology, semiconductor, and electronics industries with the Helmke-Yeich (H-Y) Tumble Drum.

The purpose of the H-Y Tumble Drum® is to test garments, wipers, gloves, and other cleanroom ready products to determine the amount of particulates and shedding. The H-Y Tumble Drum provides effective measurement of quality levels to ensure facilities are meeting the required standards.

In the Institute of Environmental Sciences and Technology document, "Garment System Considerations for Cleanrooms and Other Controlled Environments IEST-RP-CC003.2" the H-Y Tumble Drum is recommended for testing garments, wipers, gloves, and other cleanroom ready products.

The H-Y Tumble Drum tumbles items in a rotating drum to release particles from the surface of the item. It is designed to be connected to an automatic particle counter in order to sample the air within the drum to determine the average particle concentration of the air. Results depict the level of contamination the product will emit to the cleanroom environment per minute.

Features and Benefits

- Easily connected to a particle counter
- Designed to be used in a clean controlled area, i.e. laminar flow hood or contained area under HEPA filters
- Compact enough to fit under a laminar flow hood
- Durable and requires little maintenance
- Constructed of mirror finished stainless steel
- Removable baffles for easy cleaning
- Sealed direct drive motor assembly assures no particulates are generated from the motor or assembly that may affect testing
- Variable speed control and digital readout
- Entire platform can be rotated 90 degrees
- Mobile stand is counter weighted for stabilization
- IEC IP65 rated for front panel wash down
- Meets North American (ETL) safety standards

Order Number	*Description*
HYEDR-100	H-Y Tumble Drum With Dial Control, Variable Speed
HYE-101	H-Y Drum Only

Other Technical Data Available Upon Request

H-Y Tumble Drum Operator's Manual • Technical Data File

SMA MicroParticle ICS

SMA MicroParticle ICS Particle Counters measure particle counts in cleanrooms and controlled environments. They simultaneously measure 6 particle size channels as well as temperature and relative humidity.

SMA MicroParticle ICS Particle Counters are available in Handheld, Table Top, and Wall Mounted Models. All of these options have user friendly software, touchscreen interfaces, and remote connectivity features. Remote Models are also available for integration into facility monitoring systems.

The Real-Time Meter is used to pinpoint sources of contamination. This feature displays a bar graph that rises and falls with the increase of pulses counted per second, per channel. The closer the instrument is to the source, the higher the indication appears on the bar graph.

The SMA MicroParticle ICS can store up to 45,000 records and generate user defined ISO 14644-1, EU GMP Annex 1, and FS 209E reports to screen, printer, USB, or compatible software.

SMA MicroParticle ICS Particle Counters offer seamless integration into facility monitoring systems using Ethernet, USB, Wireless, or MODBUS communication.

Advanced processing allows multiple operations to take place simultaneously, even while the instrument is sampling. The SMA MicroParticle ICS is fast, efficient, and accurate.

Product Uses

- Detect and count physical particles
- Monitor air quality
- View temperature
- View relative humidity
- Generate reports
- Export data

Features and Benefits

- Measures particles from 0.3 to 25
- Variable binning with six adjustable channel sizes: 0.3, 0.5, 1.0, 2.5, 5.0, and 10.0 µm
- Flow rate is 0.1 CFM (2.83 LPM)
- Easy to transport
- Easy to configure
- Can be remotely controlled and monitored
- ISO 21501-4 compliant
- JIS B9921 compliant
- Real-Time pulse height analyzer
- Large, easy-to-use, icon driven color touchscreen
- Seamless integration into facility monitoring systems

SMA-MP-HH

SMA-MP-TB

SMA-MP-WM

MicroParticle Ordering Information

Models

Order Number	*Description*
SMA-MP-HH	SMA MicroParticle ICS, Handheld Particle Counter, 0.1 CFM
SMA-MP-TB	SMA MicroParticle ICS, Table Top Particle Counter, 0.1 CFM
SMA-MP-WM	SMA MicroParticle ICS, Wall Mounted Particle Counter, 0.1 CFM
SMA-MP-RA	SMA MicroParticle ICS, Remote Particle Counter, 0.1 CFM
SMA-MP-RB	SMA MicroParticle ICS, Remote Particle Counter, 1.0 CFM

Replacement Parts

Order Number	*Description*
SMA-MP-TA	Threaded Isoprobe, 0.1 CFM
SMA-MP-TRH	Temperature and Relative Humidity Probe
SMA-MP-PRA	Purge Filter, 0.1 CFM
SMA-MP-USB	USB Cable, 6 feet
SMA-MP-BTY	Rechargeable Battery for Handheld and Table Top Models

Optional Accessories

Order Number	*Description*
SMA-MP-BA	Barbed Isoprobe, 0.1 CFM
SMA-MP-PCE	Power Adapter for Europe and Korea
SMA-MP-PUK	Power Adapter for Malaysia, Singapore, and United Kingdom
SMA-MP-PAU	Power Adapter for Australia and China
SMA-MP-CH	External Battery Charger for Handheld and Table Top Models
SMA-MP-WLB	Wall Mounting Bracket for Wall Mounted Model
SMA-MP-HC	Carrying Case for Handheld Model
SMA-MP-BB	1.0 CFM Barbed Isoprobe for Remote Model SMA-MP-RB
SMA-MP-PRB	1.0 CFM Purge Filter for Remote Model SMA-MP-RB
SMA-MP-PTR	Printer, Case, Battery, Power Adapter, and USB Cable
SMA-MP-PAP	Paper for Printer, 10 Rolls
SMA-MP-IOQ	Installation and Operation Qualification Template


Barbed Isoprobe


CE


UK


AUST


CASE

IQ/OQ


Wall Bracket

Included Accessories

The following items are included with the purchase of SMA MicroParticle ICS Handheld, Table Top, and Wall Mounted Particle Counters:

- Threaded Isoprobe, 0.1 CFM (SMA-MP-TA)
- Temperature & Humidity Probe (SMA-MP-TRH)
- Purge Filter, 0.1 CFM (SMA-MP-PRA)
- Battery (SMA-MP-BTY) Handheld and Table Top models only.
- USB Cable (SMA-MP-USB)
- Wireless, 802.11 b/g
- AC Adapter Power Supply, 15V ~2A 100-240 VAC
- Plug Adapter for Power Supply, USA, Japan, Philippines, Taiwan
- USB Drive

Threaded Isoprobe | Temp & RH Probe | Purge Filter | Battery | USB Cable | Wireless | USA | AC Adapter | USB Drive

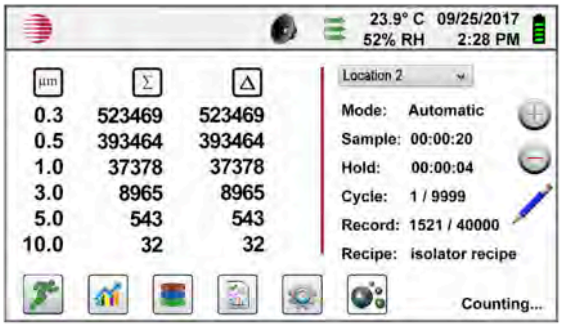
Touchscreen Interface

SMA MicroParticle ICS Handheld, Table Top, and Wall Mounted Particle Counters have user-friendly software and touchscreen interfaces. Advanced multi-processing allows many operations to take place simultaneously, even while the instrument is sampling. The SMA MicroParticle ICS is fast, efficient, and accurate.

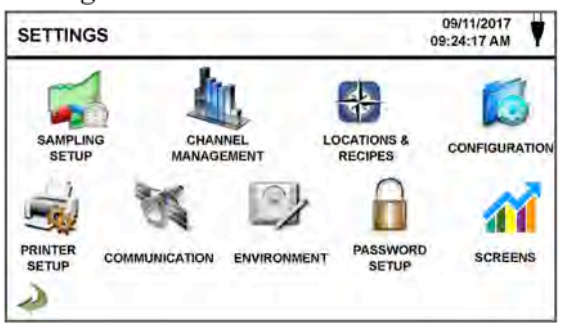
Product Uses

- Start and Stop Sampling
- Track Contamination with the Real-Time Meter
- Manage 45,000 Records
- Annotate Records while Sampling
- Create Reports
- View System Warnings and Alarms
- View Temperature and Relative Humidity
- Program Sample Time, Volume, Delay, Hold, Mode, Units, and Cycles
- Save Frequently Used Sample Settings as "Recipes"
- Manage Specific Channel Alarms
- Set Passwords
- Manage Communication and Connectivity
- And Much More!

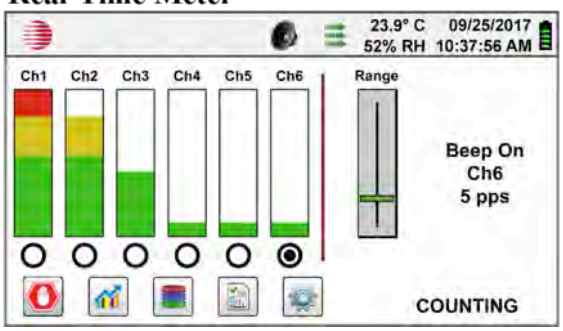
Home Screen



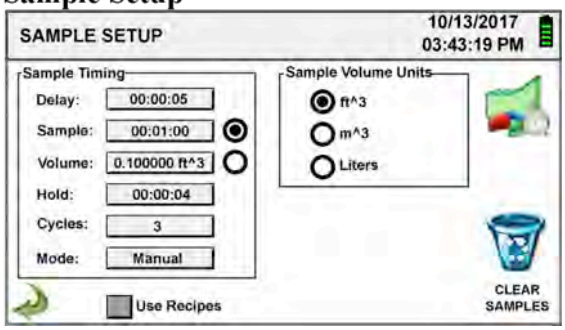
Settings



Real-Time Meter



Sample Setup



Welcome to CORE2CLEAN® PLUS

SPRAY • MOP • FOG
For The Application Of Disinfectant Agents In Controlled Areas

The adequate application of the disinfectant or sporicide to the surface is the final and most important step in assuring the demise of existent viable contaminants in controlled environments. Once we leave the validation study scenario, we are confronted with the complex situation of implementing what we have proven as acceptable into the real-life scope of our operations.

Maintaining a system that is meaningful, manageable, and defendable becomes complex in production areas as we encounter a multitude of variables. The Core2Clean Plus Systems are designed to address the application of cleaning and disinfecting agents to the surface in a meaningful and manageable methodology. Specifically designed for pharmaceutical, biotechnology, and healthcare facilities, the Core2Clean Plus System simplifies application within controlled areas.

The Core2Clean Plus systems were created by Veltek Associates, Inc., to provide specialized cleaning equipment for use in controlled environments. They are specifically designed to:

- Be repeatedly and consistently sterilized
- Use one system to spray, mop, or fog
- Allow operators to maximize disinfectant effectiveness

All the components of the Core2Clean Plus can be autoclaved or connected to a steam source for sterilization. The ability to sterilize the C2C by steam helps to prevent the introduction of viable contamination into the controlled environment.

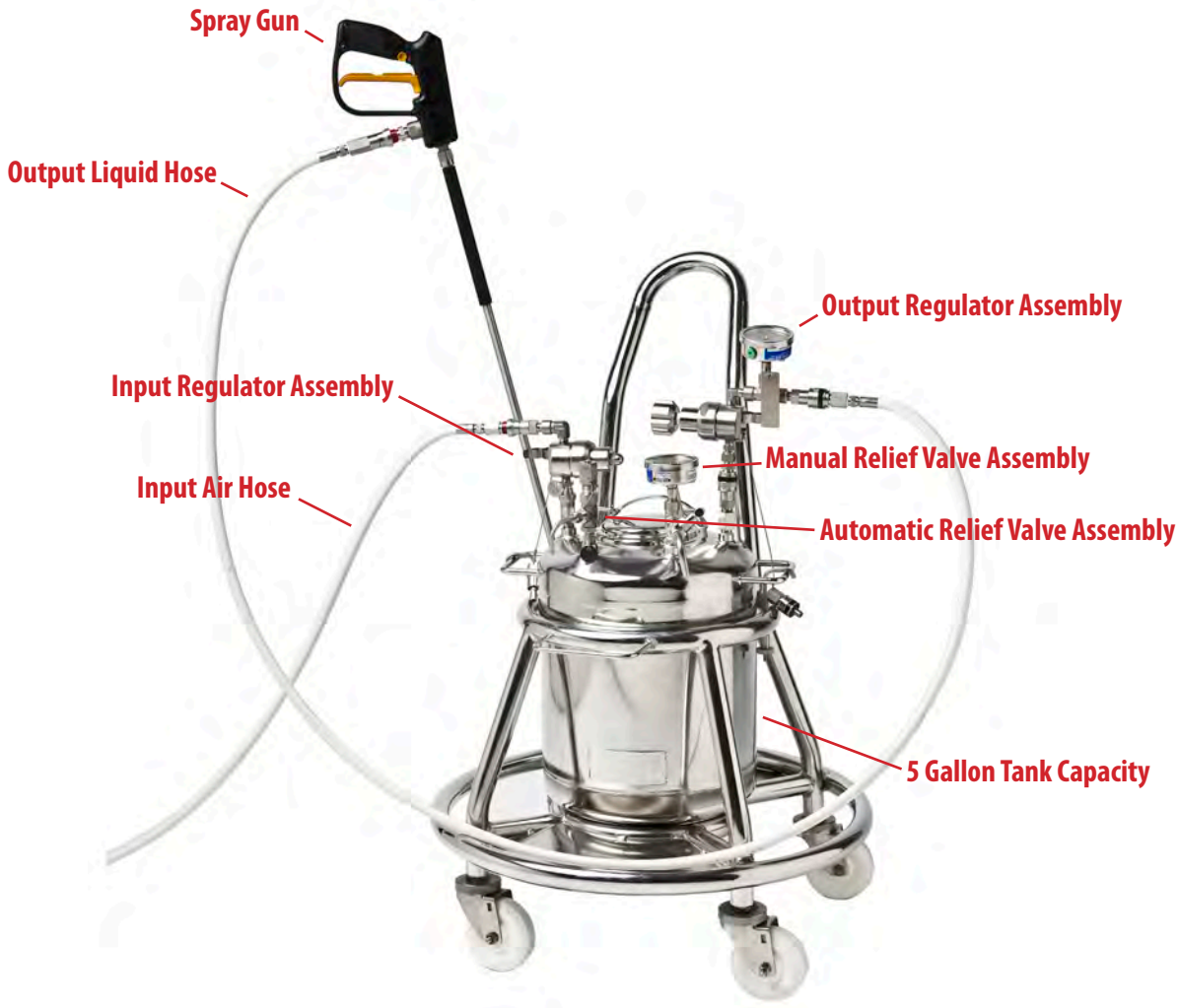
Core2Clean Plus systems can be configured to operate as three different systems: a sprayer, a wet mop, or a fogger. When configured as a spray or mop system, the operator dispenses disinfectant through a trigger-controlled wand, providing a continuous flow of clean solution through the device and on to the surface. Giving this real-time control to the operator can increase the dwell time and thus, the performance of the disinfectant. When configured as a fogging system, the disinfectant is dispensed through a stainless steel fogger that is directly controlled by the Core2Clean Plus unit.

The design of the Core2Clean Plus system allows for repeatability between operators and areas, making it easier for companies to write SOP's for different class areas. To aid in operator instruction, VAI provides an Operator's Manual with instructions for all three system uses, and videos of select processes. The manual is available in hard copy and electronic formats.

CORE2CLEAN® PLUS

Features And Benefits

- Easily connected to a trigger activated dispensing mop, trigger activated spray nozzle, or fogger
- Constructed of 316L stainless steel
- Completely sterilized using an autoclave or steam
- Operate using compressed air, simply charge and go
- Reduce cleaning time and user effort
- Simplify cleaning and disinfecting procedures
- Two and five gallon tank sizes
- Easy to remove tank
- Stainless steel ergonomic cart with accessory trays and equipment holder
- Four swivel casters provide easy movement throughout the facility
- Allows the operator to control the amount of time the disinfectant spends on the surface which increases the effectiveness of the disinfectant



Other Technical Data Available Upon Request

Core2Clean Plus Operator's Manual • Core2Clean Plus Product Validation • Technical Data File

CORE2CLEAN® PLUS

Complete Systems

Order Number	*Description*
C2C-102-P	Core2Clean Plus System, 2 Gallon, Stainless Steel Includes a two gallon tank, spray gun with 3 ft wand, spray nozzle, 8 ft output hose, 8 ft input hose, stainless steel cart with swivel casters, output regulator with pressure gauge, input regulator, manual relief valve, automatic relief valve, and tank pressure gauge.
C2C-105-P	Core2Clean Plus System, 5 Gallon, Stainless Steel Includes a five gallon tank, spray gun with 3 ft wand, spray nozzle, 8 ft output hose, 8 ft input hose, stainless steel cart with swivel casters, output regulator with pressure gauge, input regulator, manual relief valve, automatic relief valve, and tank pressure gauge.

C2C-102-P

Spray Guns and Accessories

Order Number	*Description*
C2C-100-1	Replacement spray gun with 3 ft wand, spray nozzle, and clamp. Gun has Swagelok fittings and trigger control. Nozzle is 316 stainless steel and has a 50° spray pattern of 0.52 GPM at 30 psi.
C2C-100-1-TH	Optional replacement spray wand with 3 ft wand, spray nozzle, and clamp. Gun has Swagelok fittings and thumb-style trigger control. Nozzle is 316 stainless steel and has a 50° spray pattern of 0.26 GPM at 30 psi.
C2C-100-22	Spray nozzle, Standard, 0.52 GPM, stainless steel
C2C-100-22-03	Spray nozzle, Optional, 0.26 GPM, stainless steel
C2C-100-18-36	Extension wand with clamp, bayonet, and Swagelok fittings, 36"
C2C100-2-CL	Replacement clamp for use with extension wand or mop frame

C2C-105-P

Spray gun (C2C-100-1) and Spray Wand (C2C-100-1-TH)

Note: For original Core2Clean spare parts, please contact VAI® at 1-888-478-3745. Allow 6-8 weeks for delivery.

Quick Disconnect Mop

C2C-100-8

Quick Disconnect Fogger

Quick Disconnect Sprayer

Mop Frames and Mop Heads

Order Number	*Description*	*Qty*
C2C-100-2-7	7″ Mop Frame, stainless steel	1
C2C-100-2-12	12″ Mop Frame, stainless steel	1
C2C-100-7	7″ Mophead Sponge, Polyester and Foam, Non-Sterile	12
C2C-100-8	7″ Mophead Sponge, Polyester and Foam, Sterile	48
C2C-100-9	12″ Mophead Sponge, Polyester and Foam, Non-Sterile	32
C2C-100-10	12″ Mophead Sponge, Polyester and Foam, Sterile	32
C2C-100-11	7″ Mophead Cover, Bouffant Style, Non-Sterile	32
C2C-100-12	7″ Mophead Cover, Bouffant Style, Sterile	48
C2C-100-13	12″ Mophead Cover, Bouffant Style, Non-Sterile	120
C2C-100-14	12″ Mophead Cover, Bouffant Style, Sterile	32

Fogger

Order Number	*Description*
C2C-100-03	Fogger, fogger-tee, and fogger hose
ZC2C-FOGGER-TEE	Fogger-tee only
C2C-100-4C-S	Fogger hose only with Swagelok fittings, 8′

Replacement Parts

Order Number	*Description*
C2C-100-4A-S	Input hose replacement with Swagelok fittings, 8′
C2C-100-4B-S	Output hose replacement with Swagelok fittings, 8′
C2C-100-4C-S-15	Output hose extension with Swagelok fittings, 15′
C2C-100-25	Replacement swivel caster assembly with standard wheel, white, Stainless Steel frame, stud, axle, and bearings
C2C-100-35	Replacement swivel caster assembly with Heateater wheel, brown, Stainless Steel frame, stud, axle, and bearings
C2C-WHEEL-STD	Replacement standard wheel, white
C2C-WHEEL-NYL	Replacement Heateater wheel, brown
C2C-200-1	Replacement input regulator, Stainless Steel
C2C-200-2	Replacement output regulator, Stainless Steel
C2C-200-3	Manual relief valve, Stainless Steel
C2C-200-4	Automatic relief valve, Stainless Steel
C2C-GAUGE-OUTPUTREG	Output pressure gauge, 0-60 psi scale, 316L Stainless Steel bezel, glass window
C2C-GAUGE-TANK	Tank pressure gauge, 0-160 psi scale, 316L Stainless Steel bezel, glass window
C2C-100-20	Stainless Steel cart

Welcome to Cart Transfer Systems

Cart Transfer Systems for Assuring Clean Cart Transference in Classified Areas

For countless years GMP firms have struggled with the problematic issue of "how do we transfer carts from the exterior unclassified area or the adjacent lesser grade (C/D) classified area to the Grade A/B area?" Cleaning and subsequent disinfection of the upper portions of carts, while labor intense, are manageable. However, the bases and wheels have been one of the most problematic situations in the industry to date.

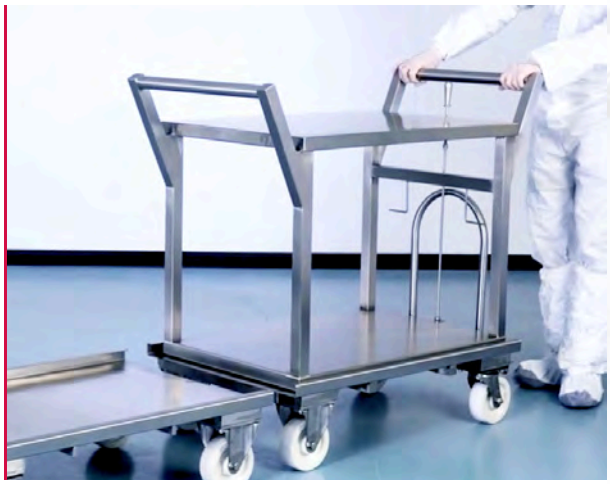
Cleaning of bases, wheels, casters and underneath the cart are virtually impossible. Any procedure implemented is, on the whole, ineffective in cleaning and disinfecting, a safety issue, and most of the time corrosive to the cart. The inability to easily reach all pertinent surface areas of the base or wheels at the floor level causes problematic situations with assured and effective wiping of these surfaces. Thus, cleaning is compromised.

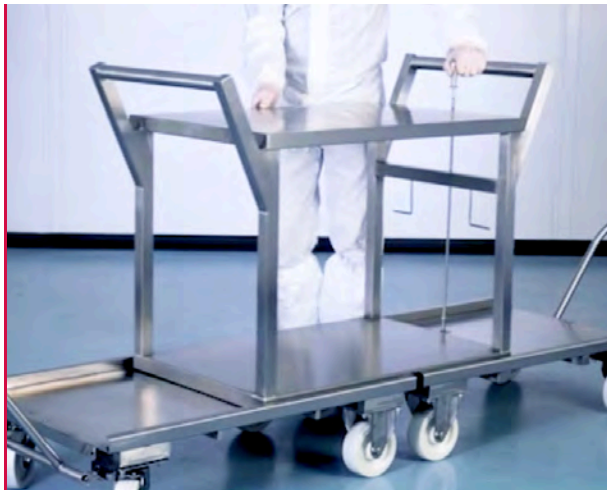
Subsequent disinfection of the surfaces usually relies on blind spraying which means some areas required to be disinfected are never wetted with the disinfectant. Over spraying of the area becomes a problem and can eventually lead to corrosion and required replacement of parts. Not only do these situations arise, but these "hard to reach locations" can contaminate employee's gloves and gowns, tear gloves, and are a safety hazard as blindly reaching under carts and behind wheels, places employees at risk of injury.

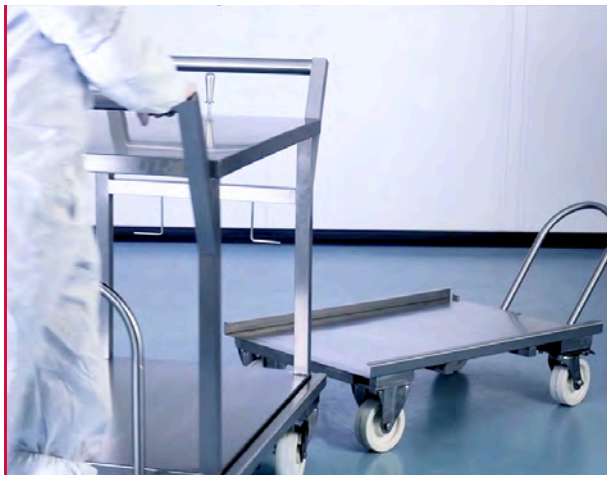
The Cart2Core™ System reduces the possibility of particulate and microbial contamination transfer from a lesser classified area to the subsequently cleaner area of the operation. The Cart2Core System allows for transfer of the cart top to another previously cleaned, disinfected, or sterilized cart base located in the next and cleaner classification. Therefore, contamination from lesser classifications coming in contact with the floor or personnel is reduced. With one lift of the handle and a slide, the Cart2Core System transfers any cart top from one cart base to another, leaving the potential contamination behind. The need for ineffective cleaning or disinfection at the floor level is eliminated.

93 How Does the Cart2Core System Work?
94 Cart2Core Models

How Does Cart2Core Work?







Step 1: The Cart2Core is pushed to the desired line of demarcation separating room classifications.

Step 2: A new cleaned, disinfected and potentially sterilized Cart2Core base is located adjacent to the cart and *the brake* is engaged.

Step 3: *The handle* of the Cart2Core System is lifted and the top of the cart slides from one base to another leaving the contamination from the other area behind.

Step 4: The dirtied Cart2Core base is cleaned, disinfected and/or sterilized for the next use in the area. Bases are deemed area specific.

Cart2Core Models

Micro Cart, Can/ Bottle Cart, Tray Cart

CC-M-100

CC-CB-200

CC-T-300

The Cart2Core™ System has been designed to simplify aseptic cart transferring. This patent pending system provides the ability for cleanroom operations to transfer materials through classified areas while reducing the possibility of particulate and microbial cross-contamination. A previously arduous process has become simple. The cart top is able to be transferred to another previously cleaned, disinfected, or sterilized cart base located in the next classified area. Simply lift the handle and slide the top of the cart onto the next base, leaving the potential contamination behind.

Available cart top configurations include: a Micro Cart for production, micro, and cleaning personnel, a Can and Bottle Cart that is designed to convey large cans and bottles, and a Tray Cart for transporting trays of vials, parts, and other needed items. All carts are completely autoclavable, sterilizable, chemical resistant, and constructed of 316L Stainless Steel.

Benefits of the Cart2Core System

- Allows for wheels and bases to be easily and effectively cleaned, disinfected, or sterilized by making the bases and wheels removable
- Reduces safety concerns with cleaning
- Provides the ability to steam sterilize bases and wheels routinely
- Reduces the overuse of disinfectants, therefore, reducing corrosion and pitting
- Reduces garment contamination and glove ripping

Quality, Construction, and Features

- Constructed of a sturdy 316L Stainless Steel for durability
- Fully welded seams that eliminates gaps, unsmooth services, and improves cleaning
- Easy pull handle for cart transfer to another base
- Wheel lock that secures the base during the transfer
- Easy grip push handles
- Fits in 4ft autoclaves
- RFID coding optional/available for easy location
- 2,400 lbs. weight capability (caster rating @ 600 psi)
- 8-point transfer efficiency
- Standard sizes listed; custom size carts are available upon request
- Can/Bottle Cart has removable pipe sides for easy loading and unloading
- Tray Cart has 20 slots for appended trays
- Located on all bases is the locking mechanism for the cart – simply pull the handle down to engage the brake

Order Number	*Description*	*Standard Size*
CC-M-100	Micro Cart, For Production, Micro, and Cleaning, Includes One Base, 316L Stainless Steel	46.25"W x 42"H x 25.5"D
CC-CB-200	Can/Bottle Cart, To Convey Large Cans and Bottles, Includes One Base, 316L Stainless Steel	39.5"W x 43"H x 25.5"D
CC-T-300	Tray Cart, For Transport of Vials, Parts, and Other Items, Includes One Base, 316L Stainless Steel	43.25"W x 72.25"H x 25.5"D
CC-M-100-B	Additional Base, Universal, Brake Handle, 316L Stainless Steel	Base: 39.5"W x 28"H x 25.5"D Base with Brake Engaged: 49.375"W x 24.5"H x 25.5"D

Welcome to DPMD

Disposable Products Manufacturing Division

VAI®'s Disposable Products Manufacturing Division (DMPD) has addressed the needs of the pharmaceutical, biotechnology, semi-conductor, medical device, electronics, and healthcare industries by designing a complete range of sterile and non-sterile disposable garments. Product lines include: sterile disposable garments, sterile and non-sterile face masks, and non-sterile cleanroom apparel.

The sterile disposable garment product lines have been designed specifically for the needs of an aseptic cleanroom operation. VAI's sterile disposable garments consist of two fabric types that are constructed identically but cited for two different uses. The SMS garment line is built with a high quality spunbond-meltblown-spunbond (SMS) non-woven polypropylene fabric that provides excellent breathability while maintaining protection. Our MP line is built using a non-woven, microporous, coated material that provides even greater personal protection in the cleanroom. VAI's disposable garments provide 100% garment sterility assurance and a significantly reduced chance of gowning contamination, while keeping the comfort and breathability when compared to traditional, reusable garments.

VAI's sterile and non-sterile PF-2 face masks are soft, comfortable, and have excellent breathability. The blend is made of rayon and laminated with an acrylic binder. VAI's PF-2 face masks provide excellent barrier capabilities, reduce goggle fogging, and are available in multiple varieties.

Additionally, VAI offers a variety of additional cleanroom apparel including bouffant hats, sweat-less headbands, and shoe and boot covers.

96	Easy2Gown System®
97-99	SMS Garments
100-101	MP Garments
102	Boot Covers and Shoe Covers
102	Face Masks
103	Sweat-less Headbands
103	Bouffant Hats

EASY2GOWN SYSTEM

An innovative, easy system developed to reduce user contamination during the critical process of aseptic gowning

DPMD

Disposable Product Manufacturing Division (DPMD)

Disposable garments are packaged in VAI's, patented, Easy2Gown System®. The Easy2Gown System is a fold that makes a proper aseptic gowning procedure an easy process rather than a routine challenge. The Easy2Gown design allows operators to have fewer manipulations while donning, therefore, reducing cross contamination.

This patented fold has been designed to minimize contact between the operator and the outside of the gown. By presenting the interior of the gown upon opening the package, the sterile exterior is protected from the transfer of contamination during the gowning process. Trained personnel able to gown without contact to the sterile, exterior, portion of the gown. The easily distinguished surface creates signification reduction in operator prep time while reducing manipulation of the garment itself.

Easy2Gown System Benefits

- Reduced training time and gowning time because the coverall is pre-folded to be donned properly
- Better efficiency and performance in gowning qualifications
- Risk of operator contamination is greatly reduced during gowning process
- On-site training available upon request

EASY2GOWN SYSTEM

SMS Garments

Sterile Disposable Coveralls, Frocks, and Hoods

SMS Easy2Gown Coverall with Attached Boots and SMS Hood with Integrated Face Mask

SMS Easy2Gown Classic Coverall with SMS Open Face Hood

SMS Easy2Gown Coverall with Attached Hood and Boots

VAI®'s disposable garment product line has been redeveloped and newly designed specifically for the needs of an aseptic cleanroom operation. The disposable garments have been refined to include more flexibility while maintaining a tailored design that works for all body types. VAI's disposable garments provide 100% garment sterility assurance and a significantly reduced chance of gowning contamination, while keeping the comfort and breathability when compared to traditional, reusable garments.

VAI's SMS garments are built using high quality spunbond-meltblown-spunbond (SMS) nonwoven polypropylene fabric @ 60g/m^2 basis weight. This fabric type has high strength and outstanding moisture vapor transmission, which translates to overall increased operator comfort. Raw materials are quality assurance tested and lot controlled.

Select the SMS garment line when comfort and breathability is the highest priority and minimal to moderate splash protection is required. The SMS garment material has excellent bacterial filtration efficiency.

Quality and Manufacturing

- Raw materials are quality assurance tested and lot controlled
- Fully assembled in a controlled environment
- Sewing area employs CAD assisted cutting and seaming equipment, therefore, reducing manual manipulation of the garment
- Individually packaged and labeled with the lot number and expiration date
- Packaged in easy tear bags with two liner bags per case
- Completely lot traceable
- Validated sterile with a 5 year closed bag expiration
- Lot sterility tested according to current USP compendium
- All garments are delivered with lot specific documentation packages including Certificates of Irradiation and Certificates of Sterility
- Garments are sized to ANSI standards for disposable coveralls

Features and Benefits

- High quality spunbond-meltblown-spunbond (SMS) nonwoven PP Fabric
- Ideal for minimal to moderate splash protection
- Suited for use where comfort and breathability is a priority
- Fabric construction provides increased operator comfort
- Highly breathable fabric that releases heat while maintaining protection
- Fabric has outstanding moisture vapor transmission
- Excellent bacterial filtration efficiency
- A 100% bound seam construction for increased durability and reduced particle permeability
- Double layer front flaps for increased protection from contamination
- Elastic thumb loops and tunnelized elastic wrists and ankles
- Elastic in high movement areas for ease of movement and to ensure appropriate garment fit
- Active athletic styling with a tailored design for flexibility and to fit all body types
- Easy2Gown folded to reduce operator contamination and reduce gowning time

SMS Fabric Configurations Available

- Classic coveralls
- Coveralls with attached boots
- Coveralls with attached hood and boots
- Open face hoods
- Hoods with integrated face mask
- Frocks

SMS Garments - Coveralls

Part Number	*Description*	*Qty/cs*
1800P-E-S-1800	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Small, Sterile	25
1800P-E-S-1801	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Medium, Sterile	25
1800P-E-S-1802	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Large, Sterile	25
1800P-E-S-1803	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, XL, Sterile	25
1800P-E-S-1804	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 2XL, Sterile	25
1800P-E-S-1805	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 3XL, Sterile	25
1800P-E-S-1806	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 4XL, Sterile	25
1800P-E-S-1807	SMS Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 6XL, Sterile	25

SMS Garments - Coveralls with Attached Boots

Part Number	*Description*	*Qty/cs*
1800P-EB-S-1815	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Small, Sterile	25
1800P-EB-S-1816	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Medium, Sterile	25
1800P-EB-S-1817	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Large, Sterile	25
1800P-EB-S-1818	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, XL, Sterile	25
1800P-EB-S-1819	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 2XL, Sterile	25
1800P-EB-S-1820	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 4XL, Sterile	25
1800P-EB-S-1821	SMS Coverall, Attached Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 4XL, Sterile	25

SMS Garments - Coveralls with Attached Hood & Boots

Part Number	*Description*	*Qty/cs*
1800P-EB-S-1808	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Small, Sterile	25
1800P-EB-S-1809	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Medium, Sterile	25
1800P-EB-S-1810	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Large, Sterile	25
1800P-EB-S-1811	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, XL, Sterile	25
1800P-EB-S-1812	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 2XL, Sterile	25
1800P-EB-S-1813	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 3XL, Sterile	25
1800P-EB-S-1814	SMS Coverall, Attached Open Face Hood and Boots, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 4XL, Sterile	25

SMS Garments - Open Face Hoods

Part Number	*Description*	*Qty/cs*
1800P-H-UC-S-1822	SMS Hood, Open Face, Easy2Gown, Individually Packaged, White, Small/ Medium, Sterile	100
1800P-H-UC-S-1823	SMS Hood, Open Face, Easy2Gown, Individually Packaged, White, Large/XL, Sterile	100

SMS Garments - Hood with Integrated Face Mask

Part Number	*Description*	*Qty/cs*
1800P-HM-S-1824	SMS Hood, Integrated Face Mask, Easy2Gown, Individually Packaged, White, Small/Medium, Sterile	100
1800P-HM-S-1825	SMS Hood, Integrated Face Mask, Easy2Gown, Individually Packaged, White, Large/XL, Sterile	100

SMS Garments - Frocks

Part Number	*Description*	*Qty/cs*
1600-LC-S-1643	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Small, Sterile	30
1600-LC-S-1644	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Medium, Sterile	30
1600-LC-S-1645	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Large, Sterile	30
1600-LC-S-1646	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, XL, Sterile	30
1600-LC-S-1647	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, 2XL, Sterile	30
1600-LC-S-1648	SMS Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, 3XL, Sterile	30

SMS Open Face Hood

SMS Hood with Integrated Face Mask

SMS Frock

EASY2GOWN SYSTEM

MP Garments

Sterile Disposable Coveralls, Frocks, Boots, Hoods, and Sleeves

MP Knee-High Boot

VAI's disposable garment product line has been redeveloped and newly designed specifically for the needs of an aseptic cleanroom operation. The disposable garments have been refined to include more flexibility while maintaining a tailored design that works for all body types. VAI's disposable garments provide 100% garment sterility assurance and a significantly reduced chance of gowning contamination, while keeping the comfort and breathability when compared to traditional, reusable garments.

VAI's MP garments are built using a heavy weight, non-woven, high quality microporous coated material. The MP disposable garments are extremely tough and fluid resistant and have superior barrier performance. This MP fabric has the best particulate performance in its segment. MP fabric is suited for use where maximum protection to product or wearer is required. The MP material has excellent liquid resistance, and creates an impervious barrier that prevents passage of bacteria and non-viable particulates through the garment material.

Quality and Manufacturing

- Raw materials are quality assurance tested and lot controlled
- Fully assembled in a controlled environment
- Sewing area employs CAD assisted cutting and seaming equipment, therefore, reducing manual manipulation of the garment
- Individually packaged and labeled with the lot number and expiration date
- Packaged in easy tear bags with two liner bags per case
- Completely lot traceable
- Validated sterile with a 5 year closed bag expiration
- Lot sterility tested according to current USP compendium
- All garments are delivered with lot specific documentation packages including Certificates of Irradiation and Certificates of Sterility
- Garments are sized to ANSI standards for disposable coveralls

MP Easy2Gown Classic Coverall with MP Open Face Hood

Features and Benefits

- Heavy weight, non-woven and high quality microporous (MP) coated material
- Suited for use where maximum protection to product or wearer is required
- Fabric is heavy weight and extremely tough
- Excellent liquid resistance, especially to chemicals
- Provides protection to low level splashes and sprays
- Has a leading bacterial and particle filtration efficiency creating an impervious barrier
- A 100% bound seam construction for increased durability and reduced particle permeability
- Double layer front flaps for increased protection from contamination
- Elastic thumb loops and tunnelized elastic wrists and ankles
- Elastic in high movement areas for ease of movement and to ensure appropriate garment fit
- Active athletic styling with a tailored design for flexibility and to fit all body types
- Easy2Gown folded to reduce operator contamination and reduce gowning time

MP Fabric Configurations Available

- Classic coveralls
- Open face hoods
- Hoods with integrated face mask
- Knee-high boots
- Protective sleeves
- Frocks

MP Garments - Coveralls

Part Number	*Description*	*Qty/cs*
1700P-E-S-17000	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Small, Sterile	25
1700P-E-S-17001	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Medium, Sterile	25
1700P-E-S-17002	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, Large, Sterile	25
1700P-E-S-17003	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, XL, Sterile	25
1700P-E-S-17004	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 2XL, Sterile	25
1700P-E-S-17005	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 3XL, Sterile	25
1700P-E-S-17006	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 4XL, Sterile	25
1700P-E-S-17007	MP Coverall, Classic, Easy2Gown, Elastic Wrists and Ankles, Zipper Closure, Individually Packaged, White, 6XL, Sterile	25

MP Garments - Open Face Hoods

Part Number	*Description*	*Qty/cs*
1700P-H-UC-S-17017	MP Hood, Open Face, Easy2Gown, Individually Packaged, White, Small/Medium, Sterile	100
1700P-H-UC-S-17035	MP Hood, Open Face, Easy2Gown, Individually Packaged, White, Large/XL, Sterile	100

MP Garments - Hood with Integrated Face Mask

Part Number	*Description*	*Qty/cs*
1700P-HM-S-17037	MP Hood, Integrated Face Mask, Easy2Gown, Individually Packaged, White, Small/Medium, Sterile	100
1700P-HM-S-17038	MP Hood, Integrated Face Mask, Easy2Gown, Individually Packaged, White, Large/XL, Sterile	100

MP Garments - Protective Sleeves

Part Number	*Description*	*Qty/cs*
1700-PS-S-1792	MP Protective Sleeve, Pair of Two, One Size, Sterile	100

MP Garments - Frocks

Part Number	*Description*	*Qty/cs*
1700-LC-S-1720	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Small, Sterile	30
1700-LC-S-1721	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Medium, Sterile	30
1700-LC-S-1722	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, Large, Sterile	30
1700-LC-S-1723	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, XL, Sterile	30
1700-LC-S-1724	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, 2XL, Sterile	30
1700-LC-S-1725	MP Frock, Elastic Wrists, Zipper Closure, Individually Packaged, White, 3XL, Sterile	30

MP Garments - Knee-High Boots

Part Number	*Description*	*Qty/cs*
1700P-MC-NS-S-17039	MP Knee-High Boot, Pair of Two, 18"Tall, 10" Opening Size, Small/Medium, Sterile	100
1700P-MC-NS-S-17040	MP Knee-High Boot, Pair of Two, 18"Tall, 12" Opening Size, Large/XL, Sterile	100
1700P-MC-NS-S-17041	MP Knee-High Boot, Pair of Two, 18"Tall, 14" Opening Size, 2XL/3XL, Sterile	100

MP Open Face Hood

MP Hood with Integrated Face Mask

MP Protective Sleeve

MP Frock

Boot Covers and Shoe Covers

Cleanroom Boot Covers are latex and lint free, with a seamless bottom, suitable for use in a clean environment. The boot covers are manufactured from a blend of polyolefin coated polypropylene then uniquely constructed to create an impervious sole and side with an elastic ankle. This combination offers extraordinary traction and skid resistance. Furthermore, the covers are extremely durable, and resistant to liquids. Overall, this is the toughest, most durable and impervious boot cover currently on the market. The boot covers are ideal for wash down uses, cleanroom uses, and are built specifically for use in low traction areas.

VAI's Shoe Covers are latex and lint free, with a surged bottom seam that is made to be suitable for the use in clean environments. These shoe covers are a special polyolefin blend laminated to a polypropylene substrate. Due to this special blend, these shoe covers offer the best traction properties and skid resistance currently available in any shoe cover. These shoe covers are built specifically for use in low traction areas. Furthermore, the covers are extremely durable, resistant to liquids, and have an elasticized top opening.

Boot Covers

Shoe Covers

Features and Benefits

- Individually inspected for size, stitching, and workmanship
- Neatly stacked and cleanroom packaged
- Extremely durable and resistant to liquids
- Latex & lint free
- Built for low traction areas
- Resistant against blood borne pathogens
- 100 pieces per inner polybag, 2 polybags per sealed bag

Order Number	*Description - Non-Sterile*	*Qty/Cs*
150-SC-NS-1520	Boot Covers, Gray, Non-Skid, 7.75"Tall, Large, Non-Sterile	100 pairs
150-SC-NS-1521	Boot Covers, Gray, Non-Skid, 7.75"Tall, XL, Non-Sterile	100 pairs
150-SC-NS-1522	Shoe Covers, Blue, Non-Skid, 16" Long, Large, Non-Sterile	100 pairs
150-SC-NS-1523	Shoe Covers, Blue, Non-Skid, 18" Long, XL, Non-Sterile	100 pairs

Face Masks

The PF-2 Face Masks have been innovatively designed for use in the pharmaceutical, biotechnology, and medical device industries or in any cleanroom operation. VAI's PF-2 Face Masks are made of 100% rayon. The PF-2 Face Masks allows for excellent breathability, comfort, and protection, while maintaining filtration efficiency. The mask is designed to absorb moisture, therefore, it continually improves its own filtration efficiency. VAI's Face Masks are low in particulate and shedding characteristics and offer a barrier between the environment and the user.

PF-2 Face Masks come standard with a comfort fit nose piece that, along with the Face Mask's absorption efficiency, virtually eliminates fogging of one's own goggles. The comfort fit nose piece also protects the wearer from the lower edge of the goggle. This feature makes it unnecessary to continually adjust the goggles.

PF-2SM-T-4-S-2021

PF-2SM-2-S-2026

Features and Benefits

- Sterile masks are available individually packaged with bulk non-sterile packaging available
- Available in two different styles: either two elastic straps or 4 ties
- Five year validated closed packaged expiration date with sterility assured via gamma irradiation
- Delivered each time with lot specific documentation
- Soft, comfortable, and breathable
- Low particulate and shedding characteristics
- Mask continually improves its own filtration efficiency
- Goggle fogging is virtually eliminated due to absorption efficiency

Order Number	*Description*	*Qty/Cs*
PF-2SM-T-4-S-2021	PF-2 Face Mask, 4 Ties, Individually Packaged, One Size, Sterile	500
PF-2SM-2-2027	PF-2 Face Mask, 2 Elastic Straps, One Size, Non-Sterile	500
PF-2SM-2-S-2026	PF-2 Face Mask, 2 Elastic Straps, Individually Packaged, Inner Bags of 50, One Size, Sterile	500

Sweat-less Headbands

Sweat-Less Headband

VAI offers a protective and comfortable sweat-less headband for use under a bouffant hat in a clean environment. The headbands were designed specifically for the comfort of the end user. Made of a laundered nylon, the sweat-less headbands are soft, comfortable, and absorbent. The intended function is to provide a mechanism to absorb perspiration in an easy to use, disposable, and clean product. Overall, this product will reduce a potential contamination risk and the need for an employee to use products from outside the operation.

Features and Benefits

- Put on before the bouffant hat for added protection
- Available in multiple sizes
- Fabric is 100% nylon for user comfort and perspiration absorption
- Soft, cool and comfortable
- Fabric is stretchable but coils to a secure fit
- Bagged and boxed in 200 per case
- All headbands are white in color

Order Number	*Description*	*Qty/Cs*
SL-01-S	Sweat-less Headband, White, Small, Non-Sterile	200
SL-01-M	Sweat-less Headband, White, Medium, Non-Sterile	200
SL-01-L	Sweat-less Headband, White, Large, Non-Sterile	200
SL-02-XL	Sweat-less Headband, White, XL, Non-Sterile	200

Bouffant Hats

Bouffant Hat

Bouffant Hat Folded

VAI's bouffant head covers are designed and manufactured in a pleated design that is low in lint and full coverage, for use in a cleanroom setting. They are made from 100% virgin polypropylene. While a standard bouffant is hand sewn, our pleated design is made by fully automated equipment, therefore, lowering possible contamination and bio-burden. They are lightweight, cool, breathable and latex free for added comfort. Having a pleated design allows for greater storage capacity in the gowning room and ease of handling and filling. Less waste is experienced because it is easier for the operator to just take one.

Features and Benefits

- Individually inspected for size, stitching, and workmanship
- Neatly stacked and clean room packaged
- Low linting fabric
- Compact design
- 100 pieces per inner polybag, 10 polybags per sealed master bag

Order Number	*Description*	*Qty/Cs*
150-BF-NS-1530	Bouffant Hat, Blue, 21" in Diameter, Non-Sterile	1000
150-BF-NS-1531	Bouffant Hat, Blue, 24" in Diameter, Non-Sterile	1000

Welcome To Cleanroom Documentation Systems

Synthetic Writing Substrate, Custom Cleanroom Documentation, Cleanroom Printer

GMP firms have a constant struggle with the task of reducing fibers, particulates, and microorganisms within classified areas. A main source of this problem is paper products used to document operations. Characteristically, paper products shed a high level of fibers and particulates. These fibers and particulates can wreak havoc on any aseptic operation by corrupting environmental conditions and final product. In response, VAI has developed an innovative way to address and solve questions surrounding particulate and fiber shedding from cleanroom documentation with our Cleanroom Documentation Systems product lines.

CleanPrint 10® is patented synthetic writing substrate that is used as the base for all Core2Write® products and as the printing medium for the Core2Print®. CleanPrint 10 is designed for ultraclean manufacturing environments and is void of any cellulose in its construction. This synthetic substrate is pliable, and is resistant to abrasion, chemicals, and ink smearing. In addition, it is extremely low in particle shedding.

Core2Write is a revolutionary customized documentation system developed specifically for GMP operations. Core2Write offers custom logbooks, labels, forms, and tags printed on VAI's CleanPrint 10. All Core2Write products are designed and packaged according to customer specifications and specific documentation requirements. Each product is available in a variety of colors, sizes, thickness, lamination, and configurations, with optional barcoding and RFID incorporation available. In addition to custom documentation, VAI offers attachable RFID facility tags printed on CleanPrint 10 for asset and/or procedural identification via our Core2Scan System.

Core2Print, a patent pending technology, revolutionizes the method for printing required sterile documentation within aseptic manufacturing environments. The Core2Print is a HEPA filtered cleanroom printer that prints wirelessly into the core from the exterior on VAI's pre-sterilized CleanPrint 10. The Core2Print unit is constructed of 316L stainless steel for durability with lexan windows for a clear view of the printer in operation.

105 CleanPrint 10®
106 Core2Write®
107 Core2Print®

CleanPrint 10®

Synthetic Writing Substrate

CleanPrint 10 is a synthetic writing substrate that has been specifically designed for ultra clean manufacturing environments and is void of any cellulose in its construction. This synthetic substrate is manufactured using patented technologies to assure strength, very low particulate generation, non-shedding characteristics, the inability for ink smearing, chemical resistance, water repellence, sterilization compatibility, and the ability for lamination.

CleanPrint 10 is the substrate used in our Core2Write® products and as the printing medium for our Core2Print®. CleanPrint 10 has been made for use with Core2Print cleanroom printing system to assure the cleanest print and bonding available but can be used with a multitude of other printers. CleanPrint 10 can be used for recording data, note taking in the aseptic core, batch record retention, equipment manuals, work instructions, and procedures.

CLP10-8.5X11-01

CLP10-8.5X11-02

Features and Benefits

- As much as 10 times stronger than other cleanroom paper; extremely durable
- Chemical and water resistant
- Inks adhere and dry immediately; resistant to ink smearing
- Cellulose and latex free
- Pliable and lightweight even in extreme temperatures, -70°C to 180°C
- Sterilization compatible
- Excellent ability to write
- Low ESD potential for reduced risk of electrostatic damage
- Lamination and finish friendly
- Substrate recycles as a plastic 7 OTHER
- Available sterile or non-sterile in standard 8.5"x11" or A4 size

Quality and Manufacturing

- Assembled in a controlled environment
- Gamma irradiated to 10^{-6} SAL and is completely validated for sterility and shelf life
- Lot sterility tested according to current USP compendium
- Each ream is individually double bagged in easy tear bags and packaged into 2 liner bags using VAI's ABCD Cleanroom Introduction System®
- Reams are individually labeled with number and expiration
- Completely traceable from start to finish
- Delivered with lot specific Certificate of Conformance, Certificate of Irradiation, and Certificate of Sterility

Order Number	*Description*	*Qty/Cs*
CLP10-8.5x11-01	CleanPrint 10, 100 Sheets/Ream, 5 Reams/Case, 8.5"x11", White, Non-Sterile	500 Sheets
CLP10-8.5x11-02	CleanPrint 10, 100 Sheets/Ream, 5 Reams/Case, 8.5"x11", White, Sterile	500 Sheets
CLP10-A4-01	CleanPrint 10, 100 Sheets/Ream, 5 Reams/Case, A4, White, Non-Sterile	500 Sheets
CLP10-A4-02	CleanPrint 10, 100 Sheets/Ream, 5 Reams/Case, A4, White, Sterile	500 Sheets

Other Technical Data Available Upon Request

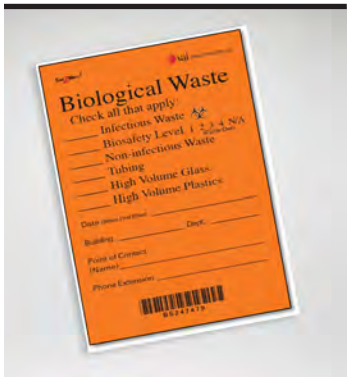
Product Technical Data Report • Specific Test Reports (Consult VAI)

Core2Write®

Custom Documentation

Core2Write Logbook

Core2Write Two-Part Tags



Core2Write Label

Core2Write® is a patented technology that revolutionizes the method of cleanroom documentation by providing custom logbooks, one part or two-part identical tear off tags, labels, and forms printed on VAI's cellulose free CleanPrint 10®. The Core2Write product line starts with a custom evaluation of what logbooks, forms, tags or labels are required. Core2Write products are fully customized to the facility's needs. Firms can incorporate their company name, logo, SOP Name & Number and Document Revision Number. Once determined, such documents and artwork are digitally designed into the product required, printed, and RFID, QR, and/or barcoding integrated.

Core2Write products, via RFID, QR, and barcoding integration, are compatible with our Core2Scan System. These Core2Write products can be used to easily track documentation, assets, and procedures. In addition to documentation, VAI manufactures a RFID Key Tag, constructed of CleanPrint 10, for asset tagging and tracking. The Core2Write line also offers gamma irradiated sterile Sharpies® and pens for use alongside documentation materials.

Features and Benefits

- Fully customized to exact customer requirements and facility needs
- Available in thousands of colors
- Logbooks are spiral bound and can incorporate stair side stepping to easily identify a missing page
- Tags have easy tear perforations that will not shed
- Labels have easy peel off non-shedding stick label backs and are available in any size
- RFID key tags are available in Ultra High Frequency RFID
- Packaged to customer requirements
- Constructed of CleanPrint 10 synthetic substrate
- Available gamma irradiated sterile

Quality and Manufacturing

- Assembled in a controlled environment
- Option of double or triple bagging and available in VAI's ABCD Cleanroom Introduction System®
- Gamma irradiated at 10^{-6} SAL
- Completely validated for sterility and shelf life
- Lot sterility tested according to current USP compendium
- Completely lot traceable and delivered with lot specific documentation

Product Uses

- Labeling
- Identify transfer containers
- Transfer cans, tanks, and bottles in Grade A-D environments
- Record cleaning procedures
- Record equipment usage and maintenance
- Document GMP operations
- Tag and track assets and procedures

Order Number	*Description*	*Qty/Cs*
VAI-PEN-01	Core2Write, Pen, Blue Ink, 10/bag, 10 bags/case, Sterile	100
VAI-SHA-01	Core2Write, Sharpie Marker, Permanent Black Ink, Fine Tip, Individually Bagged, 1/bag, 5 bags/pack, 20 packs/case, Sterile	100
VAI-TAG-01	Core2Write, RFID Tag, White, Laminated, Compatible with Core2Scan, Non-Sterile	500
VAI-TAG-GAMMA-01	Core2Write, RFID Tag, White, Laminated, Compatible with Core2Scan, Non-Sterile	500

Core2Write Logbooks, One Part Tags, Two Part Tags, Labels, and Forms are available in custom colors, features, & manufacturing, Sterile or Non-Sterile. *Each Core2Write product is made custom to each customer's specific requirements. No standard products are available. Contact your VAI Sales Representative for ordering information.*

Other Technical Data Available Upon Request

Product Technical Data Report • Specific Test Reports (Consult VAI)

Core2Print®

Cleanroom Printing System

Core2Print®, a patent pending technology, revolutionizes the method for printing required sterile documentation within aseptic manufacturing environments. The Core2Print unit is constructed of 316L stainless steel for durability with lexan windows for a clear view of the printer in operation. HEPA filtration in the cabinet is a mandatory feature. Therefore, positive pressure within the cabinet is equally filtered to the controlled environment. The CP10 printer, housed in the cabinet, wirelessly prints onto VAI's pre-sterilized, cellulose free, CleanPrint 10 synthetic writing substrate: the most durable cleanroom "paper" in the industry.

The Core2Print has been designed to provide the capability to print clean, low particulate, and sterile documents within the aseptic manufacturing environment. Due to the many features of the Core2Print unit and the CP10 printer, the cleanroom stays clean throughout documentation efforts. The mandatory HEPA filter continuously prevents contamination from exiting the cabinet.

C2P-00

CP10 Printer

C2P-00 Printing on CleanPrint 10

Features and Benefits

- Chemical resistant and can be completely disinfected
- Wireless capabilities so documentation required in the controlled areas can be signaled to print in the core from the exterior
- Prints on VAI's pre-sterilized CleanPrint 10
- Prints with chemical resistant and permanent ink
- Made for Grades A, B, C, and D
- Delivered as a complete unit
- HEPA filtered
- Replacement ink cartridges available double bagged sterile

Quality and Manufacturing

- Swivel caster wheels for easy transportation and maneuvering
- 316L Stainless Steel
- Lexan windows for a full view of the CP10 Printer
- Standard buttons and lights are programmed into the Core2Print unit to indicate print status and warnings
- Electrical: 110 VAC, 50/60 Hz (220-240 VAC available)

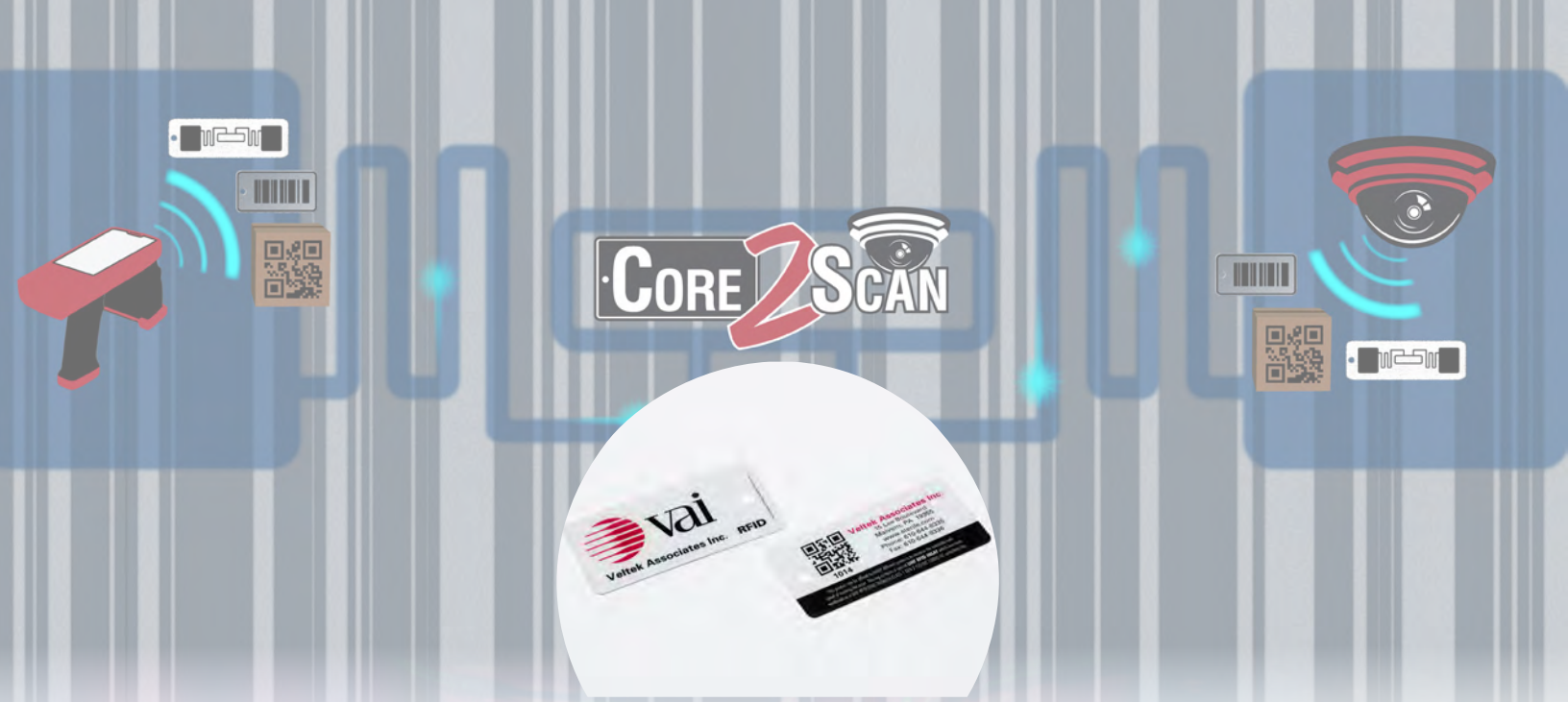
Printer Specifications

- CP10 printer is a sheet fed, high speed, and digital quality printer
- CP10 printer can print up to 12 inches/second, about 60 pages per minute
- High quality resolution: up to 1600x1600 dpi
- Excels at printing readable small fonts and sharp barcodes
- Capable of printing labels
- Ink dry time: 0.19 seconds

Order Number	*Description*	*Qty/Cs*
C2P-00	Core2Print, Cleanroom Printing System, 316L Stainless Steel, Delivered as Complete Unit	1

Other Technical Data Available Upon Request

Product Technical Data Report • Specific Test Reports (Consult VAI)



Welcome to Core2Scan System

End-to-End Tracking System

What is the Core2Scan System? The Core2Scan System is an identification and tracking system that pairs RFID, QR, or barcode identification tags, scanners (middleware), and software tracking technology with a facility's equipment, products, and/or procedures.

How does the Core2Scan System Work? Information from an asset's tag is continuously read via a handheld or fixed scanner and communicated to a facility's SCADA, LIMS, or custom tracking software system.

What are the Applications of Core2Scan? The Core2Scan System allows operations to: confirm equipment or asset location, validate cleaning timeframes and schedules, assign assets to specific areas, verify calibration deadlines and locations, assure accuracy, ensure procedural completion and precision, track manufacturing steps, and allow for Standard Operating Procedure and GMP accountability. The Core2Scan System ensures complete end-to-end tracking.

What are the Benefits of the Core2Scan System? The Core2Scan System confirms overall accountability in your facility or operation. The Core2Scan System reduces man hour documentation, is easy to use, and provides years of use at a low cost.

How is the Best System for Your Operation Determined? VAI will work with you to choose the system that best fits your operation's needs. After identifying the assets or procedures that need complete traceability we will work with you on integrating RFID, barcoding, or QR coding. With the help of VAI, firms will then choose the middleware and software to be integrated into existing facility infrastructure.

What Compatible Products Does VAI Offer? VAI manufactures compatible Core2Write products with our Core2Scan System. Core2Write RFID Key Tags, Two Part Tags, Logbooks, and Labels can incorporate barcoding, QR coding, and RFID for tracking purposes. In addition, VAI offers 316L stainless steel barcoded tags that have been designed to withstand the most extreme temperature conditions.

Welcome to VAI® Laboratories

Laboratory Testing Services

VAI Laboratories closes the gap of required regulatory documentation by providing contract microbial identification and antimicrobial effectiveness studies. These studies are performed either with one's internal environmental isolates or ATCC cultures against the chosen array of disinfecting agents.

As time and personnel within GMP firms may be unavailable to conduct these extremely important studies, one can have VAI Laboratories complete these items on a contract basis.

The identification of microbial contaminants is completed, per the customer's specifications, either by fatty acid or genetic sequencing techniques. Identification of the organism is the first step to designing a corrective action plan to destroy its existence in controlled environments.

Subsequently, the need to verify the antimicrobial effectiveness of disinfecting agents used in controlled environments is a critical step to assuring a documented disinfection system is in place. VAI Laboratories conducts either time contact kill studies on standard or user surfaces and AOAC protocol testing studies. All tests are performed in triplicate and done at three specified contact (dry time) time periods. A complete report of the study is presented to the end user to complete their documentation file for internal or external audit requirements.

VAI Laboratories is a value-added service available through Veltek Associates, Inc. that not only completes required testing but also provides an invaluable source of information from experienced laboratory and disinfection professionals who are involved daily in GMP settings.

VAI® LABORATORIES

VAI Laboratories was established to assist our customers by providing microbiological testing services ranging from the identification of microorganisms to antimicrobial effectiveness studies to prove the effectiveness of selected disinfectants.

The successful operation of a cleanroom environment is dependent on the exactness of the information available and the implementation of a plan of action from such information. Pharmaceutical, biotechnology, and healthcare professionals have been required by the FDA to address known contamination within their facility and develop a validated plan of action to remove such contamination. This requirement will not change in the future. In fact, qualifications for cleanroom operations will only become more stringent as time progresses.

The importance of addressing existent contaminants is a situation that requires guaranteed effort. Complete and documented efficacy performance testing and in-situation testing to prove the removal of existent contamination is a very costly and time-consuming task. To date, there has been no completely encompassing alternative provided in the marketplace that can provide services from identification of an organism to effective destruction of the organism from the environment. Thus, microbiologists are continually forced to focus efforts on basic laboratory services that are costly and time-consuming.

VAI has responded to the needs of our clients by installing laboratories focusing in the area of microbiological testing services. Customized to the users requests, VAI laboratory testing division is capable of performing the following services in conjunction with the use of VAI products:

Time Contact Kill Studies

ATCC cultures and/or cultures obtained from the customer (environmental isolates) will be tested over a specified contact time. The results obtained will demonstrate the effectiveness of the disinfectant tested against the suspended organism culture or coupon study. All data is then compiled into a report per organism.

Disinfectant Validation Services

An expanded and more encompassing service than the time contact kill studies listed above is the Disinfectant Validation Service. In conjunction with the customer's needs, VAI will test specified disinfectants against a variety of ATCC cultures and cultures obtained by the customer (environmental isolates). Testing will specify a contact time. The results obtained will demonstrate the effectiveness of the disinfectant tested against the suspended organism culture or coupon study. All data is then compiled into one report and will provide an effective means to address regulatory concerns for addressing contamination within one's operations.

Microbial Identification Services

Sequence based genetic microbial identification. The 16S rRNA sequencing capitalizes on state-of-the-art technology to identify both bacteria and fungi.

Consulting

The design of a biodecontamination system warrants experience and familiarization with disinfection systems that have proven success in the control of microbial and particulate contamination in cleanroom environments. VAI has the experience and the personnel to completely evaluate operations and address the necessary requirements for operation of the controlled areas.

ASEPTIC PROCESSING, INC.

A Division Of Veltek Associates, Inc.

Since 1981, Veltek Associates, Inc. (VAI®) has played an innovative role to the pharmaceutical, biotechnology, and medical device industries by partnering with clients to develop strategic products and services that have improved operations and reduced costs associated with the ingress of contamination. During the history of the company, VAI has manufactured and developed over 500 strategic and critical contamination control products, systems, and services. These innovative solutions are used by most GMP organizations worldwide.

In over three decades of operations, VAI has not only developed innovative products and services but also the know how to assure successful and compliant systems in order to monitor and control contamination.

In 2001, after many years of refinement and development, VAI introduced a unique and specialized value added advantage for its clientele known as VAI Consulting Services. In 2003, due to its enormous growth, the division was reorganized into Aseptic Processing, Inc. (API). API is the consulting and training division of Veltek Associates, Inc.

The mission and key focus of the division is to lead the industry in specific contamination control and environmental monitoring systems. Unlike many consulting organizations, API® focuses specifically in the areas of Cleaning and Disinfection Systems, Disinfectant Validation Services, Component Entry Systems, Environmental Monitoring Systems, Aseptic Processing Systems, Media Fills, and Personnel Training Systems. API has assisted a multitude of pharmaceutical, biotechnology, and medical device organizations worldwide. API was also responsible for the cleaning and disinfection training that was conducted by the U.S. Food and Drug Administration's CDER and CBER divisions in 2001-2004.

Uniquely, the division works to combine all contamination control aspects within an organization into one system that is compliant, effective, and assures repeatable success.

Specialized Consulting Services In The Areas Of

- Environmental Monitoring Systems
- Cleaning/Disinfection Systems
- Personnel Gowning Systems
- Aseptic Processing Systems
- Component Entry Systems
- Personnel Training
- Media Fill Trials
- Process Cleaning

ASEPTIC PROCESSING, INC.

Consulting Services

API® provides a wide range of technical services to the pharmaceutical and biotechnology industries. Our experience encompasses the following critical areas:

Cleaning and Disinfection Component Entry Systems
Review of current and future practices; advanced technology; cleaning of controlled and non-controlled areas; equipment cleaning and disinfection; disinfectant and sporicidal qualifications and validations; cleaning practices and methods of application; contamination control practices; residue removal; clean in place systems (CIP); sterilize in place systems (SIP); component entry systems; compliance assurance; and training of personnel.

Environmental Monitoring, Media Fills, and Air Flow Studies
Review of current and future technology; development of air, surface and personnel programs; qualification of controlled environments; validation; compliance assurance; conducting investigations; corrective actions; media fills; air flow studies; and training of personnel.

Aseptic Processing
Review of current and future practices; advanced technology; review of aseptic practices; regulatory compliance; facility design; aseptic filling; terminal sterilization; and in-house training of personnel.

Personnel Gowning
Personnel gowning for controlled and non-controlled environments; qualifications; aseptic practices; gown training programs; and training of personnel.

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REV 03/18