



Scientifically Advanced Interiors

FORENSIC EQUIPMENT

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BURNABY

TORONTO

HALIFAX

Safekeeper[®] SERIES



General and Special Purpose Forensic Evidence Drying Cabinets

- Provides Environmentally Safe Processing, Drying and Storage of Evidence



Safekeeper[®] FDC-006XT



"The World's Most Extensive Selection of Ductless Fume Hoods."



Schedule
Contract GS-GTF5632P



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INTRODUCTION

Safekeeper® Series Forensic Evidence Drying Cabinets are designed to store, dry or otherwise process forensic evidence in the controlled environment of a tamper resistant compartment to maintain the chain of custody.

The industry leading [Multiplex™ Filtration System](#), combined with professional design and construction offer convenience and protect the safety of personnel during use, maintenance and decontamination of the cabinets.

APPLICATIONS

Safekeeper Forensic Evidence Drying Cabinets provide cost-effective storage and containment for forensic evidence as it is dried by a constant flow of air. Air Science® ductless technology removes airborne pathogens, particulates, fumes and odors emitted by the contents. Using innovative filtration technology, the forensic evidence drying cabinet creates a safe work environment over the widest range of applications in the industry.

State and Federal Crime Laboratories \ Medical Examiners and Coroners \ Law Enforcement Agencies \ Hospital Emergency Rooms \ Drug Agencies



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

KEY FEATURES

General Purpose Series Drying Cabinets

- General Purpose Safekeeper cabinets are available in bench/desktop and floor-standing models. Select models are available with two, three or four independent drying chambers, each with its own filtration and control system.
- Most models are designed and configured for mobile use in uncontrolled environments.

Special Purpose Series Drying Cabinets

- The Drugkeeper™ series is designed for safe storage of confiscated hazardous chemicals and illegal drugs.
- The Safeswab horizontal airflow cabinet is useful for protecting biological evidence collected on swabs from external contaminants and personnel in the working environment.
- The Evidence Transporter™ is an “on-site” fabric chamber developed for transporting evidence from the field to the lab.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted cabinets for a broad range of applications.

Environmental Benefits. Air Science forensic evidence drying cabinets isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless Safekeeper Forensic Evidence Drying Cabinet is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.



Safekeeper FDC-002, shown with timed UV system

Safeswab FDC-001

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.

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Safekeeper FDC-007D
duplex model, shown open

DESIGN FEATURES

- A. Filter I.D. Window:** A conveniently, strategically placed front cover window shows the installed filter part number and the installation date to encourage timely filter replacement.
- B. Filter Door Key:** Filter access key prevents unauthorized removal or accidental exposure to dirty filters.
- C. Control Panel:** Electronic controls and displays include switches for the blower and lights, an electronic hour counter and filter blockage alarm, all located on a convenient front surface panel.
- D. Hour Counter:** Assists in tracking evidence drying time.
- E. Internal Manual Speed Controller:** Authorized personnel may set the centrifugal fan motor speed as desired.
- F. Filter Blockage Alarm:** Continuously monitors filter loading and alerts user when service is needed.
- G. Dynamic Filtration Chamber:** The dynamic filter chamber prevents any possible leakage of contaminated air by pressurizing the fan plenum (positive air) and depressuring the filter compartment (negative air).
- H. Outside Sidewall Hose:** Connects to external water supply, located to avoid tripping hazard.
- I. Hanging Rod:** All General Purpose and Downflow models have removable stainless steel hanging rod with anti-slide cover.
- J. Drain:** Central 1.5" bottom drain with anti-siphon trap and strainer to capture contaminants in waste water stream.

- K. Push-Pull™ Shelving:** All General Purpose models have three perforated polypropylene Push-Pull shelves with drain channel that can be installed and removed with one hand and may be stored within or outside the cabinet; two included with Downflow unit.
- L. Drain Valve:** Manual open and close drain valve.
- M. Electrostatic Pre-Filter:** All pre-filters (doors and main) are changed quickly without tools and are of a standard size for simple stocking and ordering. Optional HEPA filter available.
- N. Doors:** Blue metal framed tempered glass doors with key lock and tamper proof seal provide improved security, stability and ease of cleaning.
- O. Built-in Containment Compartment:** Adheres to Occupational Safety and Health Administration (OSHA) Standards 29 CFR 1910.1030 regarding bloodborne pathogens.

ADDITIONAL FEATURES

Construction: All models are available in polypropylene construction. See selection chart for specifications and dimensions. Available in 120V, 60HZ and 230V, 50Hz models.

Optional UV Lamp: Activated ultraviolet light creates light emission conditions known to provide secondary disinfection of the interior between cases to prevent cross contamination, ensuring integrity of the samples for DNA testing.

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Each Air Science Safekeeper Forensic Evidence Drying Cabinet includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science **Multiplex Filter** offers a range of options for high performance protection.

Multiplex filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

A high capacity air handling system delivers face velocity of 100 fpm.

DESIGN

Professional quality Air Science general and special purpose forensic evidence drying cabinets comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.

SELECTION

General and special purpose forensic evidence drying cabinets are available in Safekeeper, Drugkeeper, Safeswab and Evidence Transporter models, in a variety of sizes and configurations, totaling 60 different options.



Basic Control Panel



Advanced Control Panel



FSA/Autocal Control Panel



Monitair Control Panel

RELIABILITY

Internal systems are isolated from fumes, extending product life.

CONTROL

The **basic control panel** is standard on Drugkeeper models and includes an On/Off switch and filter blockage alarm.

The **advanced control panel** is standard on Safekeeper models and includes an On/Off switch, filter blockage alarm and hour meter to aid in determining filter life.

The **optional FSA/Autocal controller** displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional Monitair microprocessor controller** monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen.

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multiple^{XX}



FILTRATION

At the heart of the Safekeeper product line is innovative filtration technology. The **Multiplex Filtration System** consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

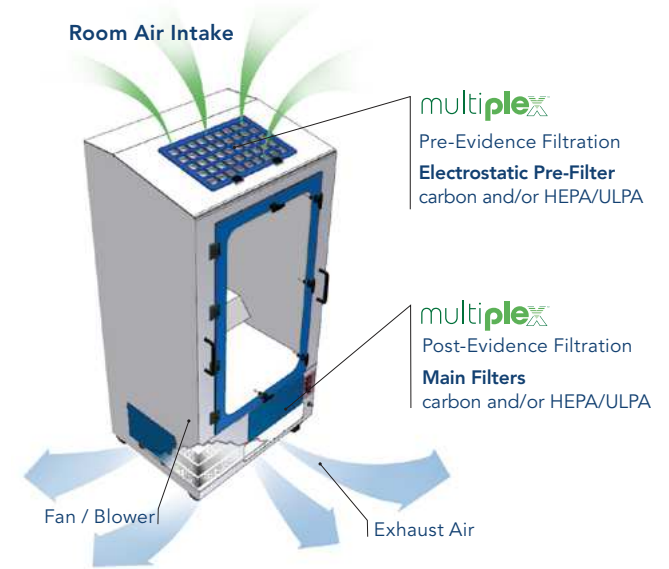
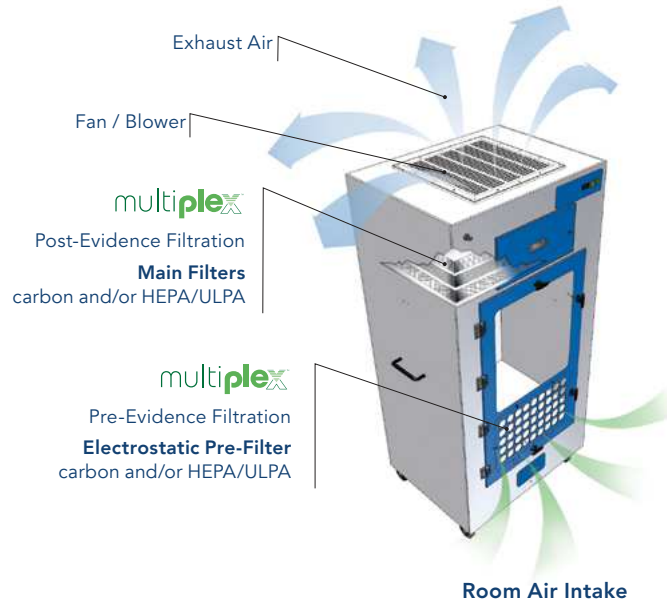
AIRFLOW

Safekeeper Forensic Evidence Drying Cabinets maintain a constant face velocity of 100 fpm in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the Multiplex Filtration System; clean air is returned to the room.

The **main filters** are easy to replace and install. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

⚠ The **pre-filter** may be replaced while unit is in operation.

The **safety filter** is easy to replace and enhances filter capacity of the hood.



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.













FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
HEPA/UPLA	Powders and particulates.

*Other formulas may be available.

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MULTIPLEX™ FILTRATION GENERAL PURPOSE SERIES								SPECIAL PURPOSE SERIES					
Product Map	Safekeeper™							Drugkeeper		SafeSwab		Transporter	
	Floor Mounted (all sizes)				Benchtop	Downflow		Floor Mounted		Benchtop	Desktop		Mobile
	Single	Duplex	Tri	Quad	Single	Single	Duplex	Single	Duplex	Single	Single	Single	Single
Nominal Width (inches)	30, 36, 39, 48, 60, 72, 96	48, 60, 72, 96	72	72	24, 30	36, 48, 60	36, 48, 60	34	64	34	18	7	28
Airflow													N/A
DNA Decontamination	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	N/A

MULTIPLEX™ FILTRATION

Door Filter, Pre-Evidence

Electrostatic	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
HEPA / ULPA	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional

Main Filters, Post-Evidence

First	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	electrostatic	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA
Second, Biological	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	HEPA / ULPA	---	---	---
Third	carbon	carbon	carbon	carbon	carbon	carbon	carbon	carbon	carbon	carbon	---	---	---

Exhaust, Back-up, Biological or Emergency Filtration

Carbon or HEPA / ULPA	optional	optional	optional	optional	optional	---	---	optional	optional	optional	---	---	---
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Construction

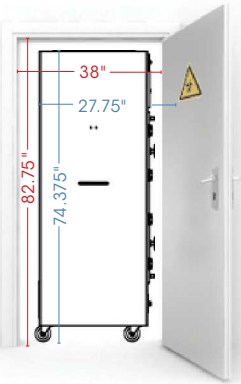
Finish	<... Polypropylene ...>												---
Electrical	<... 120V, 60Hz, or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ...>												---
Monitoring	<... Filter Blockage ...>												---

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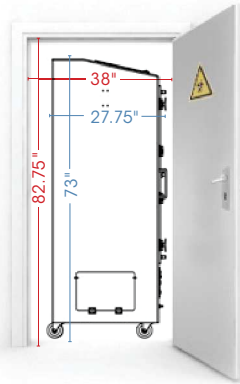
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Standard Units



Downflow Units



DECONTAMINATION AND WASTE WATER REMOVAL FEATURES

General Purpose Units, Including Downflow Models

- Outside sidewall hose connection to external water supply, located to avoid tripping hazard.
- Internal wash down spray hose for decontamination and cleaning.
- Central 1.5" bottom drain with anti-siphon trap.
- Strainer to capture contaminants in waste water stream.
- Electric waste water pump with foot activated switch to pump to remote drains (not available on Downflow).
- Optional OSHA biohazard labeled waste water container for use when drain is not available.
- Optional locking waste water compartment with cover to prevent spillage during transport (standard on Downflow models). Included OSHA biohazard labeled waste water tank.
- Optional on-board clean water tank with electric pump.

SITE PREPARATION

The Safekeeper drying cabinet with floor drain is designed to eliminate the need for hard plumbing, drain traps or hard wiring. Downflow and standard models are uniquely sized to pass through standard doorways.

WATER SUPPLY

- Hose location is exterior, right side, with 8' hose provided.
- Hose is configured for standard water faucet connection with female fitting.
- Standard tap water supply pressure recommended; greater pressure requires an optional water regulator.
- Never leave water connected when not in use.

DRAIN

- A hard drain and trap are not required.
- The interior drain is flush with the chamber floor and employs gravity and an integrated power assist pump.
- Drain hose routes to standard sink, floor drain or container.

ELECTRICAL

- Line cord provided with standard molded plug, NEMA 4-14P for quick connection to standard wall outlet, NEMA 5-15R.
- A separate breaker is recommended.
- Line cord location is at cabinet top.

EXHAUST

- Ductless filter output through cabinet top.
- Optional 8" collar available with butterfly valve for external ducting.

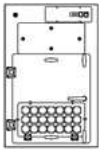


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FDC-002M



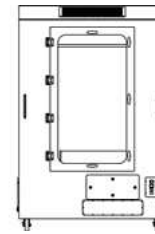
FDC-002



FDC-006GL



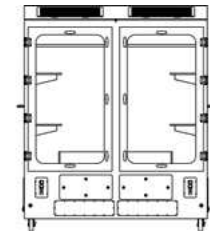
FDC-007GL



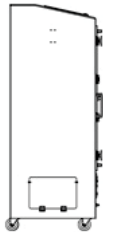
FDC-008GL



FDC-008DGL



Side View



SAFEKEEPER GENERAL PURPOSE

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship

Benchtop Models

Safekeeper Benchtop models are sized to fit on a standard lab bench: the 19" high model fits on a 24" deep bench, the 24" high model fits on a 30" deep bench.

FDC-002M	18.375" / 465 mm	24" x 24" x 30" / 610 x 610 x 762 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	68 / 31	118 / 54
FDC-002	18.375" / 465 mm	30" x 27.375" x 48" / 762 x 705 x 1219 mm	40" x 40" x 60" / 1016 x 1016 x 1524 mm	110 / 50	160 / 73

Downflow Models

Safekeeper Downflow Forensic Drying Cabinets, designed for use in a garage or parking area with dirty/sandy floors, feature activated carbon main filter formulated to capture putrid organic odors as well as other fumes such as alcohol, solvents, gasoline, etc.

Standard Downflow Models

FDC-006GL	45.25" / 1150 mm	36" x 27.75" x 73" / 914 x 705 x 1854 mm	40" x 40" x 88" / 1016 x 1016 x 2235 mm	229 / 104	273 / 124
FDC-007GL	45.25" / 1150 mm	48" x 27.75" x 73" / 1219 x 705 x 1854 mm	58" x 40" x 88" / 1473 x 1016 x 2235 mm	403 / 183	445 / 202
FDC-008GL	45.25" / 1150 mm	60" x 27.75" x 73" / 1524 x 705 x 1854 mm	65" x 40" x 88" / 1651 x 1016 x 2235 mm	471 / 214	520 / 236

Duplex Downflow Model (2 chambers)

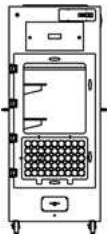
FDC-008DGL	45.25" / 1150 mm	60" x 27.75" x 73" / 1524 x 705 x 1854 mm	65" x 40" x 88" / 1651 x 1016 x 2235 mm	485 / 220	530 / 241
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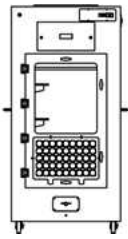
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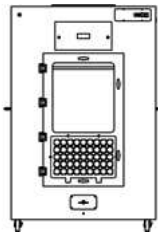
FDC-003



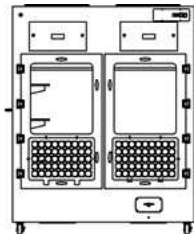
FDC-006



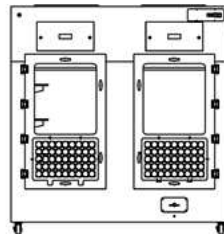
FDC-007



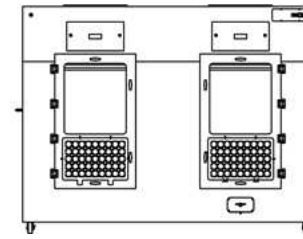
FDC-008



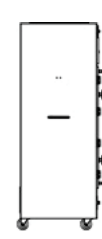
FDC-010



FDC-011



Standard



Tall



SAFEKEEPER GENERAL PURPOSE: SINGLE CHAMBER

Safekeeper single chamber evidence drying cabinets include a single control system and single or dual filter/blower systems, depending on size; standard height cabinets on casters are designed to pass through standard doorways for maximum mobility, tall units are typically housed in a fixed location.

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship

Standard Height Models (1 chamber)

FDC-003	45.25" / 1150 mm	30" x 27.75" x 74.375" / 762 x 705 x 1890 mm	40" x 40" x 89" / 1016 x 1016 x 2260 mm	213 / 97	245 / 111
FDC-006	45.25" / 1150 mm	36" x 27.75" x 74.375" / 914 x 705 x 1890 mm	40" x 40" x 89" / 1016 x 1016 x 2260 mm	229 / 104	273 / 124
FDC-006XL	45.25" / 1150 mm	39" x 27.75" x 74.375" / 991 x 705 x 1890 mm	45" x 40" x 89" / 1143 x 1016 x 2260 mm	258 / 117	302 / 137
FDC-007	45.25" / 1150 mm	48" x 27.75" x 74.375" / 1219 x 705 x 1890 mm	58" x 40" x 89" / 1473 x 1016 x 2260 mm	403 / 183	445 / 202
FDC-008	45.25" / 1150 mm	60" x 27.75" x 74.375" / 1524 x 705 x 1890 mm	65" x 40" x 89" / 1651 x 1016 x 2260 mm	471 / 214	520 / 236
FDC-010	45.25" / 1150 mm	72" x 27.75" x 74.375" / 1829 x 705 x 1890 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	586 / 266	609 / 276
FDC-011	45.25" / 1150 mm	96" x 27.75" x 74.375" / 2438 x 705 x 1890 mm	106" x 40" x 89" / 2692 x 1016 x 2260 mm	670 / 304	715 / 324

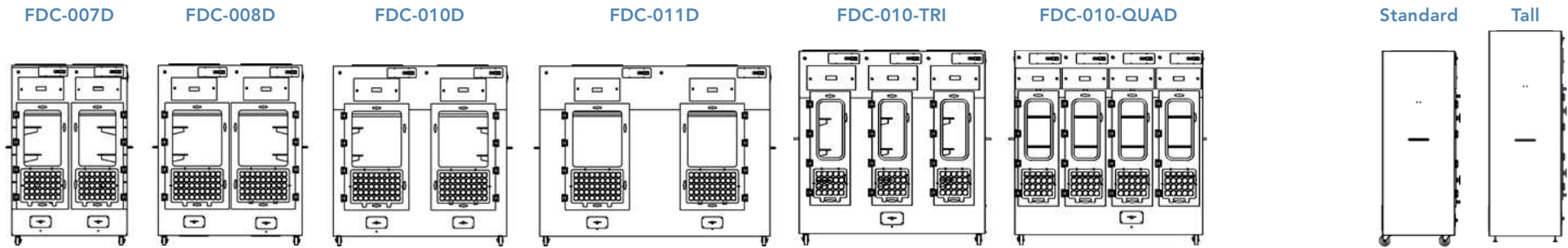
Tall Models (1 chamber)

FDC-003XT	51.125" / 1300 mm	30" x 27.75" x 82.25" / 762 x 705 x 2090 mm	40" x 40" x 89" / 1016 x 1016 x 2260 mm	213 / 97	245 / 111
FDC-006XT	51.125" / 1300 mm	36" x 27.75" x 82.25" / 914 x 705 x 2090 mm	40" x 40" x 89" / 1016 x 1016 x 2260 mm	229 / 104	273 / 124
FDC-006XL-XT	51.125" / 1300 mm	39" x 27.75" x 82.25" / 991 x 705 x 2090 mm	45" x 40" x 89" / 1143 x 1016 x 2260 mm	258 / 117	302 / 137
FDC-007XT	51.125" / 1300 mm	48" x 27.75" x 82.25" / 1219 x 705 x 2090 mm	58" x 40" x 89" / 1473 x 1016 x 2260 mm	403 / 183	445 / 202
FDC-008XT	51.125" / 1300 mm	60" x 27.75" x 82.25" / 1524 x 705 x 2090 mm	65" x 40" x 89" / 1651 x 1016 x 2260 mm	471 / 214	520 / 236
FDC-010XT	51.125" / 1300 mm	72" x 27.75" x 82.25" / 1829 x 705 x 2090 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	586 / 266	609 / 276
FDC-011XT	51.125" / 1300 mm	96" x 27.75" x 82.25" / 2438 x 705 x 2090 mm	106" x 40" x 89" / 2692 x 1016 x 2260 mm	670 / 304	715 / 324

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SAFEKEEPER GENERAL PURPOSE: MULTI-CHAMBER

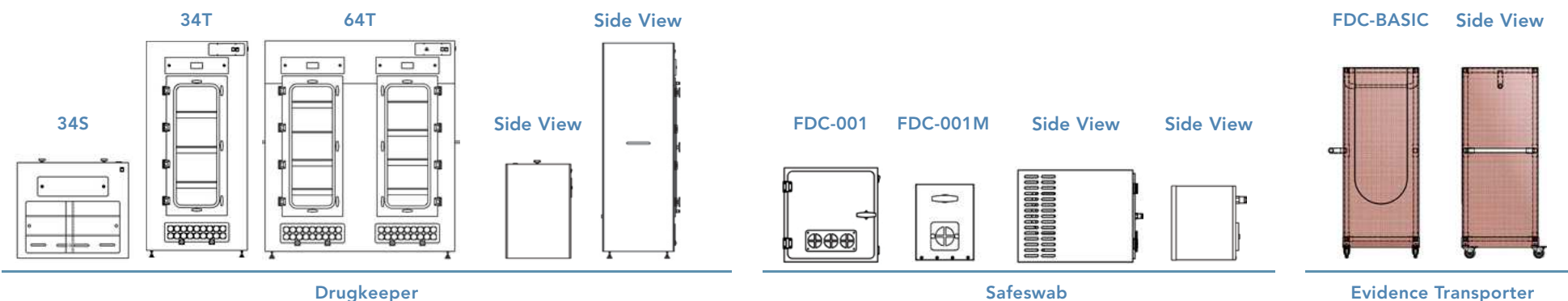
Safekeeper General Purpose multiple chamber evidence drying cabinets feature independently filtered and controlled chambers within a single cabinet; Triplex and Quad models permit simultaneous but separated processing.

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
Standard Height Duplex Models (2 chambers)					
FDC-007D	45.25" / 1150 mm	48" x 27.75" x 74.375" / 1219 x 705 x 1890 mm	58" x 40" x 89" / 1473 x 1016 x 2260 mm	451 / 205	502 / 228
FDC-008D	45.25" / 1150 mm	60" x 27.75" x 74.375" / 1524 x 705 x 1890 mm	65" x 40" x 89" / 1651 x 1016 x 2260 mm	485 / 220	530 / 241
FDC-010D	45.25" / 1150 mm	72" x 27.75" x 74.375" / 1829 x 705 x 1890 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	601 / 273	623 / 283
FDC-011D	45.25" / 1150 mm	96" x 27.75" x 74.375" / 2438 x 705 x 1890 mm	106" x 40" x 89" / 2692 x 1016 x 2260 mm	715 / 324	760 / 345
Tall Duplex Models (2 chambers)					
FDC-007DXT	51.125" / 1300 mm	48" x 27.75" x 82.25" / 1219 x 705 x 2090 mm	58" x 40" x 89" / 1473 x 1016 x 2260 mm	451 / 205	502 / 228
FDC-008DXT	51.125" / 1300 mm	60" x 27.75" x 82.25" / 1524 x 705 x 2090 mm	65" x 40" x 89" / 1651 x 1016 x 2260 mm	485 / 220	530 / 241
FDC-010DXT	51.125" / 1300 mm	72" x 27.75" x 82.25" / 1829 x 705 x 2090 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	601 / 273	623 / 283
FDC-011DXT	51.125" / 1300 mm	96" x 27.75" x 82.25" / 2438 x 705 x 2090 mm	106" x 40" x 89" / 2692 x 1016 x 2260 mm	715 / 324	760 / 345
Triplex Models (3 chambers)					
FDC-010-TRI	51.125" / 1300 mm	72" x 27.75" x 74.375" / 1829 x 705 x 1890 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	689 / 313	739 / 335
Quad Models (4 chambers)					
FDC-010-QUAD	45.25" / 1150 mm	72" X 27.75" X 74.375" / 1829 X 705 X 1890 mm	80" x 40" x 89" / 2032 x 1016 x 2260 mm	723 / 328	773 / 351

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SAFEKEEPER SPECIAL PURPOSE SERIES

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
Drugkeeper Models					
Drugkeeper Storage Cabinets, useful for short-term storage of hazardous chemicals and other substances typically associated with drug investigations, minimize health and environmental risks when handling chemical vapors, residues, VOCs and other materials related to methamphetamine production.					
34S	18.5" / 470 mm	34" x 20" x 29" / 864 x 508 x 737 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	115 / 55	170 / 80
34T	49" / 1245 mm	34" x 24" x 79" / 864 x 610 x 2007 mm	40" x 40" x 87" / 1016 x 1016 x 2210 mm	229 / 104	273 / 124
64T	49" / 1245 mm	64" x 24" x 79" / 1624 x 610 x 2007 mm	80" x 40" x 87" / 2032 x 1016 x 2210 mm	586 / 266	609 / 276
Safeswab Models					
Safeswab Swab Dryer safely dries evidence swabs while protecting them from cross-contamination using a HEPA main filter formulated to contain particles or biological material that may be present.					
FDC-001	15.25" / 387 mm	16" x 20" x 16" / 406 x 508 x 406 mm	24" x 24" x 24" / 610 x 610 x 610 mm	18 / 8.2	25 / 11.4
FDC-001M	15.25" / 387 mm	7.5" x 8" x 9.5" / 191 x 204 x 242 mm	12" x 12" x 12" / 305 x 305 x 305 mm	9 / 4.1	14 / 6.4
Evidence Transporter					
Safekeeper Mobile Evidence Transporter is designed to maintain the integrity and credibility of evidence collected in the field. Ships and stores knocked down for compact storage, quickly field assembled when needed; white PVC frame with Texilene™ mesh fabric conceals unsightly material from display, resistant to liquids and odors, easily cleaned.					
FDC-BASIC	68" / 1727.25 mm	35" x 29" x 69" / 889 x 736 x 1753 mm	30" x 29" x 13" / 762 x 736 x 331 mm	34 / 16	38 / 18

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OPTIONS & ACCESSORIES

Safekeeper Series		Models	Part
FSA/Autocal Controller*	The optional FSA/Autocal controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	General Purpose & Drugkeeper	ADV-P
Monitair Controller*	The optional microprocessor controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Emits audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen. Not TUV compliant.	General Purpose & Drugkeeper	MON-P
Evidence Drying and Collection Trays	Tray fits into bottom of cabinet for additional drying space and allows trace items to fall into it. Available in white or black.	General Purpose & Drugkeeper	TRAY-FDC
Stainless Steel Leveling Feet	Adjustable leveling feet. Included on XT models.	General Purpose & Drugkeeper	LEVEL-FDC
Locking Wheels	Non-marking heavy duty caster wheels. Included on standard height and Downflow models.	General Purpose & Drugkeeper	WHEEL-FDC
Windowless Doors	Used in locations near public viewing areas to conceal cabinet contents.	All units	SDoor-FDC
Ducting Collar	Allows unit to be connected to ductwork for running in vented mode, ductless mode or both.	General Purpose & Drugkeeper	EXCOLLAR-P10
Waste Water Container	Safekeeper cabinets have built-in contaminant containment compartments that adhere to Occupational Safety and Health Administration (OSHA) Standards 29 CFR 1910.1030 regarding bloodborne pathogens.	General Purpose & Drugkeeper	CARBOX-FDC
Start-Up Supply Kit	The start-up kit provides everything required to safely operate and maintain a forensic evidence cabinet. Includes hangers, latex gloves, disinfectant spray, paper lining for collecting trace evidence, tamper proof seals and a set of pre-filters.	General Purpose & Drugkeeper	STARTKIT-FDC
Internal Fluorescent Lamp*	Lamp in vapor proof housing. Included with Monitair option.	All but Basic model	LIGHT-FDC
UV Lamp**	Creates light emission conditions know to safely decontaminate interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	All units except Evidence Transporter	UV-FDC

* Factory installed; specify when ordering.

** Includes timer and door microswitch. Safety precautions must be followed.

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Get a Quote. 

Warranty Info.

WARRANTY

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STANDARDS & COMPLIANCE

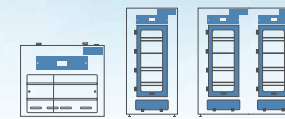
Quality Management Systems	ISO 9001: 2015
Electrical Safety	UL-C-61010-1 CAN/CSA C22.2 61010-1-12 EN 61010-1:2010 CE Mark
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner



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Drugkeeper™



34S

34T

64T

Special Purpose, Evidence and Illegal Substance Storage Cabinet

- Provides Short-Term Storage of Hazardous Materials



Drugkeeper 64T



"The World's Most Extensive Selection of Containment Solutions."



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INTRODUCTION

Drugkeeper™ special purpose storage cabinets are designed for short-term storage of hazardous chemicals and substances typically associated with drug investigations. These cabinets minimize health and environmental risks from chemical vapors and residues, VOCs and other hazardous materials associated with methamphetamine production.

The industry leading Multiplex™ Filtration System, combined with professional design and construction offer convenience and protect the safety of personnel during use, maintenance and decontamination of the cabinets.

APPLICATIONS

Drugkeeper special purpose storage cabinets offer an economical solution for safe storage of confiscated hazardous chemicals and illegal drugs. Cabinet airflow and face velocity protect users from incidental exposures while electronic airflow monitoring assures continuous safety. Activated carbon main filters are formulated for general purpose storage; optional HEPA filters eliminate exposure to biological particulates. Air Science ductless technology combined with innovative filtration technology creates a safe work environment over a wide range of applications.

State and Federal Crime Laboratories \ Medical Examiners and Coroners \ Forensics \ Law Enforcement Agencies \ Hospital Emergency Rooms \ Drug Agencies

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted cabinets for a broad range of applications.

Environmental Benefits. Air Science Drugkeeper special purpose storage cabinets isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless Drugkeeper storage cabinet is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.

KEY FEATURES

- Activated carbon main filter formulated for general purpose storage to contain putrid organic odors as well as fumes (i.e. alcohol, solvents, gasoline, etc.).
- Perforated polypropylene shelves.
- With optional HEPA filter, eliminates exposure to biological particulates; see Options & Accessories.
- Upflow airflow geometry operates at 120-180 FPM face velocity to exchange air through activated carbon main filter.
- Available with windowless doors.



Drugkeeper 34S



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

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Drugkeeper 34T

DESIGN FEATURES

- A. Control Panel:** Electronic controls and displays include switches for the blower, lights and filter blockage alarm, all located on a convenient front surface panel.
- B. Filter Blockage Alarm:** Continuously monitors filter loading and alerts user when service is needed.
- C. Dynamic Filtration Chamber:** The dynamic filter chamber prevents any possible leakage of contaminated air by pressurizing the fan plenum (positive air) and depressuring the filter compartment (negative air).
- D. Filter:** Includes carbon filter. Optional HEPA filter available; see Options & Accessories.
- E. Construction:** Cabinets feature all polypropylene construction.

ADDITIONAL FEATURES

Safe to Use: Cabinet airflow and face velocity protect users from incidental exposures to fumes, odors or bloodborne pathogens.

Self-Testing: Electronic airflow monitoring assures continuous safety. An optional filter saturation alarm (electronic gas sensor) monitors carbon filter performance.

Easy to Clean: Drugkeeper cabinets are constructed of polypropylene that does not absorb liquids, is easily cleaned with household detergents and can be sprayed with a 10% bleach solution to eliminate biological contaminants.

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Each Air Science Drugkeeper storage cabinet includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science [Multiplex Filtration System](#) offers a range of options for high performance protection.

- Multiplex filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

DESIGN

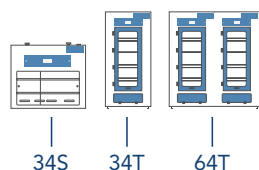
Professional quality Air Science Drugkeeper storage cabinets comply with current technical and safety regulations.

The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



SELECTION

Drugkeeper special purpose storage cabinets are available in 3 standard sizes featuring white polypropylene construction.

CONTROL

The **basic control panel** is standard and includes an On/Off switch and Filter Blockage alarm.

The **optional FSA/Autocal controller** displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional FSA controller** offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.



Basic Control Panel



FSA/Autocal Control Panel



FSA Control Panel

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FILTRATION

At the heart of the Drugkeeper product line is innovative filtration technology. The **Multiplex Filtration System** consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on [page 7](#).

secur.
safe disposal service



Filter disposal services are available in selected markets providing responsible destruction or recycling of used saturated filters in authorized facilities.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The special purpose storage cabinet can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single, blended or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM SUMMARY				
Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical Within Cleanroom
Secondary/ Stacked Filter, Optional	C	H	C	H
Primary Filter	C	H	H	C
Pre-Filter	P	P	P	P

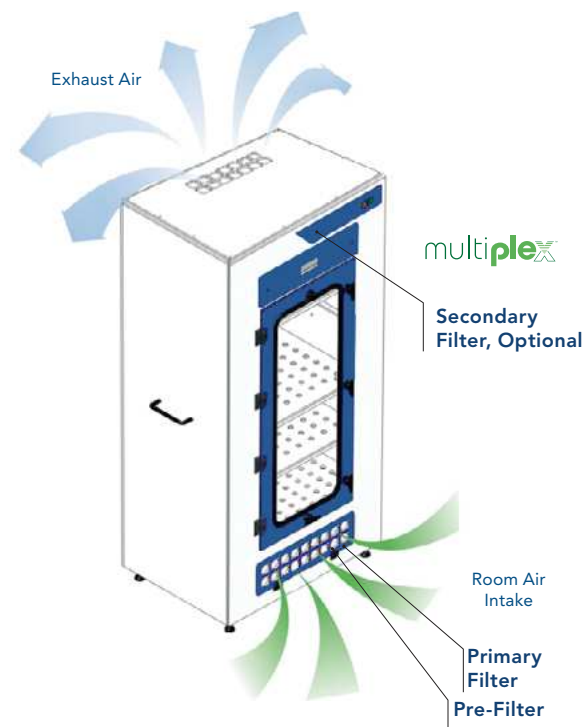
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

AIRFLOW

Upflow airflow geometry operates at 120 - 180 FPM face velocity to exchange air through an activated carbon main filter in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the Multiplex Filtration System; clean air is returned to the room.

The **main filters** are easy to replace with no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

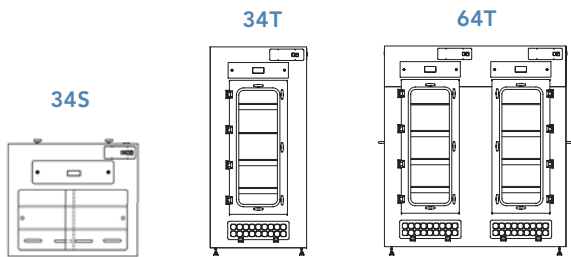
⚠ The **pre-filter** may be replaced while unit is in operation.



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MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
Drugkeeper					
34S	18.5" / 470 mm	34" x 20" x 29" / 864 x 508 x 740 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	115 / 55	170 / 80
34T	49" / 1245 mm	34" x 24" x 71" / 864 x 610 x 1800 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	229 / 104	273 / 124
64T	49" / 1245 mm	64" x 24" x 71" / 1626 x 610 x 1800 mm	80" x 40" x 87" / 2032 x 1016 x 2210 mm	586 / 266	609 / 276

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PRODUCT SPECIFICATIONS

Filtration	34S	34T 64T
Airflow	<... Upflow. ...>	
Construction	34S	34T 64T
Finish	<... Polypropylene. ...>	
Controls	<... Main On/Off. ...>	
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ...>	
Monitoring	<... Filter blockage. ...>	
Lighting	<... Optional LED. ...>	
Door	Sliding.	Hinged, keylocked.

FILTER SPECIFICATIONS

Drugkeeper Model	34S	34T 64T
Secondary/Stacked Filter, Optional*	(1)	(1)
Primary Filter*	(1)	(1)
Pre-Filter*	(1)	(1)

* For specific examples refer to Multiplex filtration system summary on [page 5](#).

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.

*Other formulas may be available.



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.

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OPTIONS & ACCESSORIES

Drugkeeper Model		34S	34T 64T
HEPA Filter (Drugkeeper 64T requires 2 filters)	A self-contained filter designed to physically capture particles larger than 0.3 microns.	ASTS-030	ASTS-030
FSA/Autocal Controller*	The optional FSA/Autocal controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	ADV-P	ADV-P
FSA Controller*	The optional FSA controller offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.	FSA	FSA
Cabinet Lighting*	Compact fluorescent bulb removed from air stream.	LIGHT-FDC	LIGHT-FDC
Wheels*	Standard leveling feet, optional locking wheels.	WHEEL-FDC	WHEEL-FDC
UV Lamp**	Creates light emission conditions know to safely decontaminate interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	UV-FDC	UV-FDC

* Factory installed; specify when ordering.

** Includes timer, door microswitch and fully closing front sash, all clear panels polycarbonate (UV filtering). Safety precautions must be followed.

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WARRANTY

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STANDARDS & COMPLIANCE

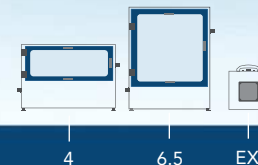
Quality Management Systems	ISO 9001: 2015
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner



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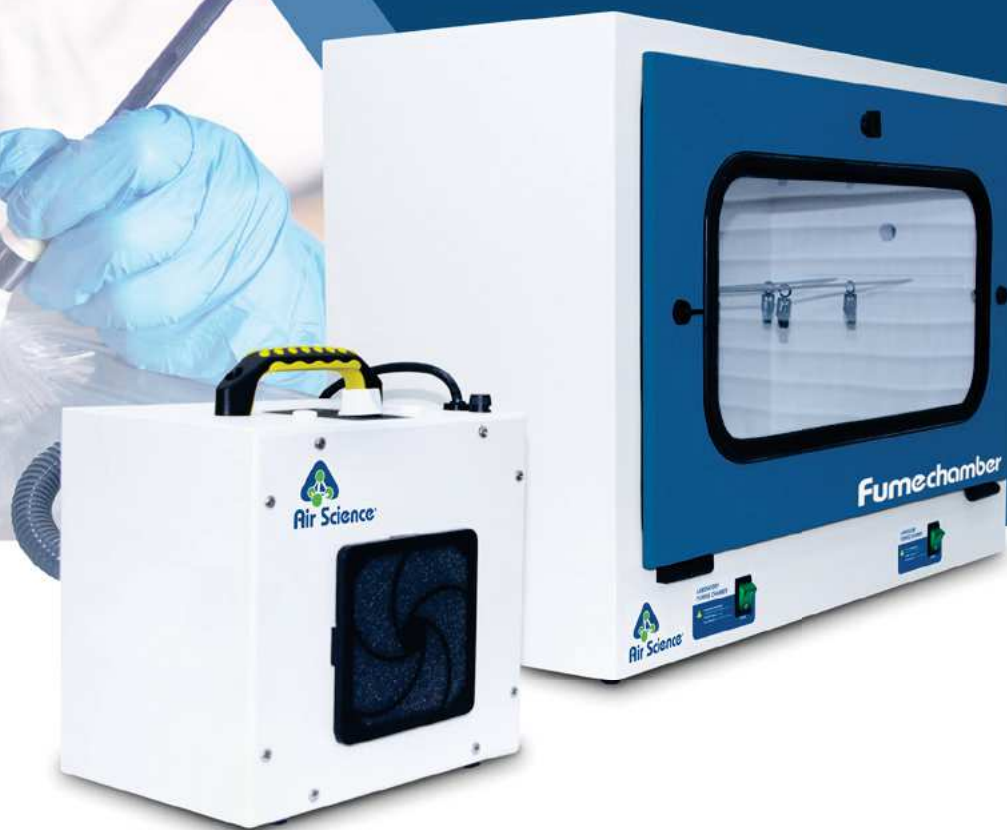


Fumechamber™



Laboratory Fuming Chamber

- Safe, Effective Latent Print Development Using Cyanoacrylate
- Fume Extractor Filters the Chemicals from the Air



BLC-4 and BLC-EX



"The World's Most Extensive Selection of Containment Solutions."



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INTRODUCTION

The laboratory fuming chamber is an effective way to use cyanoacrylate fuming for latent print development on various surfaces. The Fume Extraction unit allows for safe purging of the cyanoacrylate when the printing cycle is complete.

APPLICATIONS

Using innovative filtration technology, the Fumechamber creates a safe work environment over the widest range of applications in the industry.

Compounding / Balance Enclosures,
Microscopes and Robotic Equipment / Forensics /
Histology / Educational / Microscopy /
Mobile and Classroom Demonstrations /
Pharmaceutical / Powder Fingerprinting /
Powder Weighing / Sample Prep Work / Soldering /
Solvent Cleaning and Welding / Veterinary / Dental



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KEY FEATURES

- In the basic fuming chamber, vapors of cyanoacrylate combine with fingerprint residues and polymerize to form a hard, whitish deposit. Once developed, such prints may either be photographed without further treatment or may be enhanced by dusting with powders for subsequent lifting by tape or stained with dyes.
- The fume extractor is a self-contained cyanoacrylate filtration system that connects directly to the laboratory fuming chambers via the inlet port. The noxious odors and fumes inside the chamber are drawn through an activated carbon filter.

DESIGN FEATURES

A. Heating Elements. Multiple heating elements, operating independently or simultaneously, allow for safe accelerated cyanoacrylate development of latent prints.

B. Door. The heater elements are self-limited for precise surface temperatures and a large clear front door panel allows for close monitoring of latent print development.

C. Inlet Ports. Two inlet ports will accommodate accessories such as the optional Fume Extractor, portable humidifier and standard fuming wands.

D. Blower. The unit is equipped with a low noise blower and built-in timer adjustable for up to 30 minute cycles, as well as a continuous running position.

E. Timer. Select the extraction time needed and handle other tasks while the fume extraction unit purges harmful vapors from the chambers.

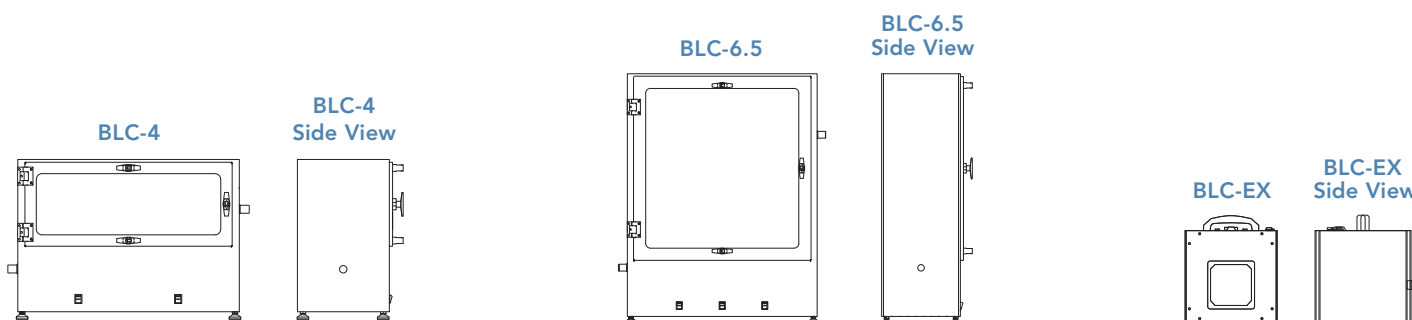


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¹⁾ Energy consumption disclosure is based on internal testing with primary filters during normal operation.
Power consumption published is nominal and dependent on cabinet size.

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MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
Metal	Internal (W × D × H)	External (W × D × H)	Shipping (W × D × H)	Net	Ship
Fuming Chamber					
BLC-4	30.5" × 12.5" × 17" / 775× 318 × 432 mm	31" × 13" × 21" / 787× 330 × 533 mm	36" × 13" × 26" / 914 × 330 × 660 mm	27 / 12	30 / 14
BLC-6.5	30.5" × 12.5" × 31" / 775× 318 × 787 mm	31" × 13" × 34" / 787 × 330 × 864 mm	36" × 18" × 36" / 914 × 457 × 914 mm	43 / 19	45 / 20
Fuming Extraction Unit					
BLC-EX	--	9.5" × 9.5" × 9.5" / 241 × 241 × 241 mm	16" × 16" × 16" / 406 × 406 × 406 mm	17 / 7	19 / 9

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Fuming Chamber

PRODUCT SPECIFICATIONS

Construction	BLC-4	BLC-6.5
Finish	<... White epoxy coated steel. ...>	
Door	<... UV absorbing transparent window. ...>	
Controls	<... Hotplate On/Off. ...>	
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ...>	
Number of Hotplates	2	3
Hanging Bar Levels	2	3
Hanging Rod / Clips	4 / 16	6 / 24
Intel Ports	2	

Fume Extraction Unit

PRODUCT SPECIFICATIONS

Construction	BLC-EX
Finish	<... White epoxy coated steel. ...>
Controls	<... Adjustable timer for Mains On/Off. ...>
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ...>
Hose Length	<... 36" / 914 mm. ...>
Carbon Filter	<... 3 lbs / 76 kg. ...>

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
HEPA/UPLA	Powders and particulates.

*Other formulas may be available.

OPTIONS & ACCESSORIES

Fuming Chamber

Portable Humidifier and Hose	External humidifier accelerates development of prints	PHUM-BLC
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¹⁾ Energy consumption disclosure is based on internal testing with primary filters during normal operation.
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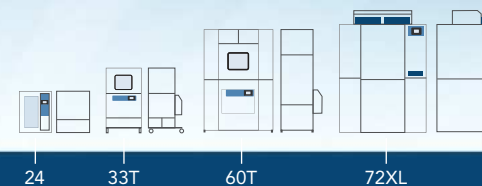
STANDARDS & COMPLIANCE

Quality Management Systems	ISO 9001:2015
Environment	ISO 14001:2015 ENERGY STAR® Partner



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Automatic Cyanoacrylate Fuming Chamber

- Safely Detect Quality Latent Prints and Reproducible Results



SafeFumeTM 360
ARV-33T Chamber shown
with optional UV Lamp and UPS

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INTRODUCTION

A member of the trusted Safefume™ line of automatic fuming chambers, the Safefume 360 is used to develop latent prints from non-porous surfaces in a controlled and safe environment. The Safefume 360 is available in several sizes, from small bench top units to larger walk-in chambers.

APPLICATIONS

Using innovative filtration technology, the Safefume 360 cyanoacrylate fuming chamber creates a safe work environment over the widest range of applications in the industry.

State and Federal Crime Laboratories \ Crime Scene Investigation \ Law Enforcement Agencies \ Medical Examiners' Programs \ Criminal Justice Education



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

KEY FEATURES

- Optional side and rear windows for 360° view of development.
- Choose from multiple sizes, bench top to floor standing.
- Multi-chamber cabinets available.
- Caster wheels standard on all models except bench top series.
- Optional UV Lamp decontamination.
- Evidence easily positioned inside the chamber using adjustable hanging rods.
- Cyanoacrylate is placed within the chamber; starting the cycle triggers the automated system that controls the hot plate, cabinet humidity, door lock, internal circulation fan and purge cycle.
- Recirculatory design requires no ducting for setup.
- Cyanoacrylate vapors are filtered by a special carbon filter that ensures no dangerous substances are exhausted into the atmosphere.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted cabinets for a broad range of applications.

Environmental Benefits. Air Science® Safefume 360 cyanoacrylate fuming chambers isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Easy to Install. The cyanoacrylate fuming chamber is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

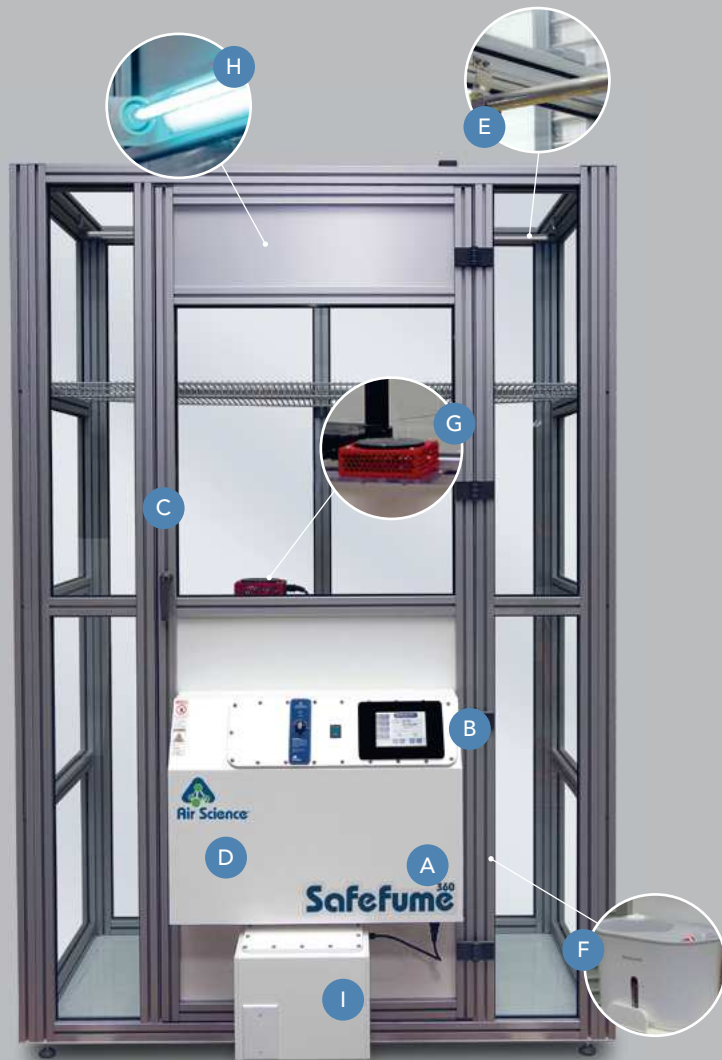
Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



Safefume 360 ARV-24

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SafeFume 360 ARV-60T

DESIGN FEATURES

- A. Dynamic Filtration Chamber:** The dynamic filter chamber prevents leakage of contaminated air by maintaining partial vacuum in the filter plenum.
- B. Control Panel:** The microprocessor control panel manages the Printbuster™ Pro operating sequence with control, oversight and display of all processing functions. The LCD display works with a touchpad data entry keypad to establish all operating parameters.
- C. Doors:** Tempered glass, keyed doors with aluminum frame and tamper-proof seal provide improved security, stability and ease of cleaning. Scratch-resistant glass for lasting optimum visibility.
- D. Fan:** High velocity sparkless and brushless centrifugal fan.
- E. Hanging Rods:** Removable and adjustable stainless steel hanging rods for proper orientation of evidence.
- F. Water Nebulizer/Humidifier:** Water nebulizer elevates humidity in chamber.
- G. Hot Plate Accelerator:** Hot plate to polymerize ethyl cyanoacrylate. Air Science also offers optional adjustable temperature hot plates to accommodate a variety of fuming techniques, including MicroBurst™ and typical Super Glue® methods. Hot plates are available with basic knob controls as well as advanced microprocessor controls with LED display.
- H. Optional UV Lamp:** Activated ultraviolet light creates light emission conditions known to permit disinfection of the interior between cases to prevent cross-contamination, ensuring integrity of the samples for DNA testing.
- I. Uninterruptable Power Supply:** Backup power supply to support all systems for one complete machine cycle in the event of power failure.

ADDITIONAL FEATURES

Construction: Models are available in aluminum frame with tempered glass construction. Locking doors are tempered glass with tamper-proof seal and aluminum frame. See selection chart for specifications and dimensions. Available in 110V, 60Hz single phase electrical supply (other voltages available on request).

Internal Chamber Cleansing: The Internal Chamber Cleansing feature automatically activates to eliminate contamination and remove the harmful vapor from the unit. This process is especially important if the unit is used infrequently or only during certain periods of high evidence volume.

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Each Air Science Safefume 360 cyanoacrylate fuming chamber includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

DESIGN

Professional quality Safefume 360 cyanoacrylate fuming chambers comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters, and HEPA/ULPA filters used in our products.



SELECTION

Safefume 360 cyanoacrylate fuming chambers are available in 4 specific sizes, totaling 8 standard models.

CONTROL

Air Science Printbuster Pro LCD Interface Technology

Printbuster Pro is the industry's first use of touchscreen technology offering a simple, easy-to-use solution delivering repeatable results every time. The automatic latent fingerprint development cycle manages the following:

- Relative humidity setpoint. Relative humidity is established via a water-filled nebulizer/humidifier.
- Cabinet temperature display.
- Door status with lock alarm.
- Circulation fan On/Off.
- Hot plate On/Off. The hot plate accelerator polymerizes ethyl cyanoacrylate for a specific time interval.
- Processing time.
- Purge cycle time. Fumes are removed from the chamber through the carbon filter; air is continuously recirculated within the chamber.
- Emergency stop and filter condition, with an optional electronic gas sensor emits an audible and visual warning when the main filter must be changed.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



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FILTRATION

At the heart of the cyanoacrylate fuming chamber is innovative filtration technology. The filtration system consists of a pre-filter and a main filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with cyanoacrylate vapors moved through the filter by an air handling blower.

View available filters and descriptions on [page 7](#).



Filter disposal services are available in selected markets providing responsible destruction or recycling of saturated filters in authorized facilities.

FILTER CONFIGURATION

This feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Safefume 360 can be equipped with a single activated carbon main filter to adsorb cyanoacrylate vapors.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

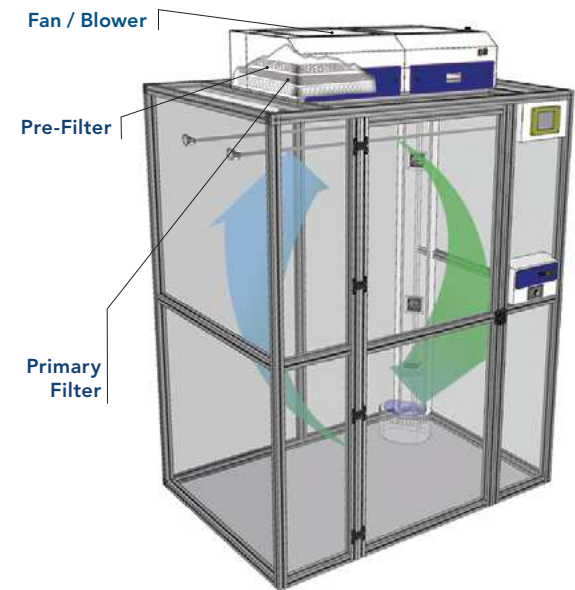
- P. Electrostatic Pre-Filter:** Protects the main filters from aerosols, mists, dust and particulates.
- C. Activated Carbon Main Filter:** Designed for cyanoacrylate containment.

FILTRATION SYSTEM SUMMARY				
Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical Within Cleanroom
Primary Filter	C	--	C	C
Pre-Filter	P	P	P	P

AIRFLOW

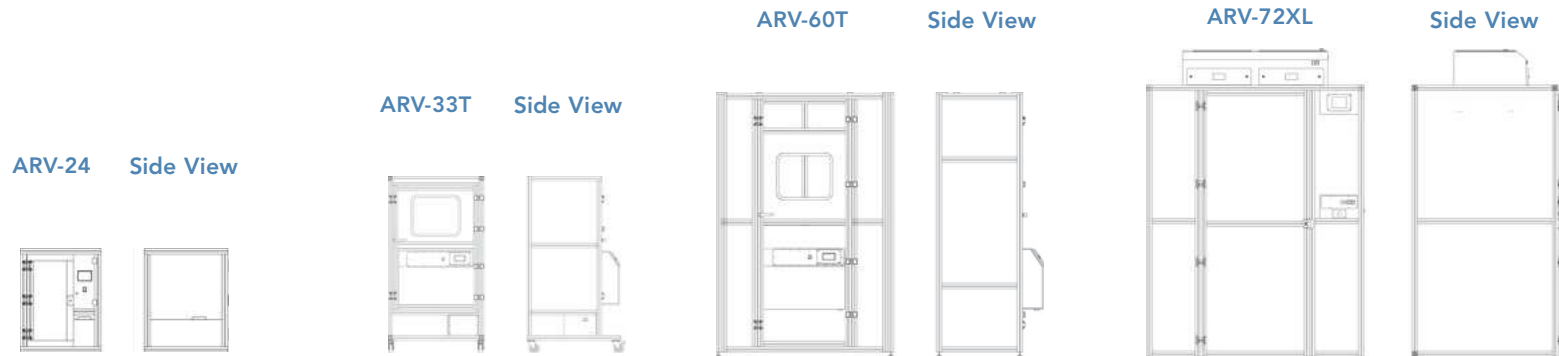
The Safefume 360 fuming chamber maintains a constant internal airflow, creating uniform conditions within the chamber. Contaminated air is pulled through the filtration system.

The main filter is easy to replace and install. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.



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MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
ARV-24	27.5" / 699 mm	24" x 25" x 30" / 610 x 635 x 762 mm	30" x 34" x 38" / 762 x 864 x 965 mm	83 / 38	125 / 57
ARV-33T	50" / 1270 mm	33" x 34" x 70" / 838 x 864 x 1778 mm	39" x 43" x 78" / 991 x 1092 x 1981 mm	291 / 132	331 / 150
ARV-60T	82" / 2083 mm	60" x 29" x 87" / 1524 x 737 x 2210 mm	66" x 44" x 95" / 1676 x 1118 x 2413 mm	390 / 177	449 / 204
ARV-72XL	80" / 2032 mm	72" x 48" x 86" / 1829 x 1219 x 2184 mm	80" x 54" x 95" / 2032 x 1372 x 2413 mm	825 / 374	968 / 439

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PRODUCT SPECIFICATIONS

Construction	ARV-24	ARV-33T	ARV-60T	ARV-72XL
Finish	<... Aluminum frame with tempered glass and door with key locks and tamper-proof seals. Hanging rail. ...>			
Blower	<... Centrifugal blower. ...>			
Controls	<... Main On/Off. ...>			
Monitoring	<... Complete monitoring of all functions. ...>			
Shelves	1	1	3	–
Hanging Rods	1	2	2	2

FILTER SPECIFICATIONS

Safefume 360 Model	ARV-24	ARV-33T	ARV-60T	ARV-72XL
Primary Filter(s)*	1	1	1	1
Pre-Filter*	1	1	1	1

* For specific examples refer to filtration system summary on [page 5](#).

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.

*Other formulas may be available.

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OPTIONS & ACCESSORIES

SafeFume 360 Model		ARV-24	ARV-33T	ARV-60T	ARV-72XL
Evidence Baskets	Hanging wire baskets to place evidence.	BASKET	BASKET	BASKET	BASKET
Advanced Hot Plate	Advanced hot plates heat up to 400°C and offer microprocessor controls and LED display with enhanced safety features. Low profile design has a maximum capacity of 600 mL. All aluminum construction. Available in 110V or 230V configurations.	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230
Automatic Lock-Out System	Safety supplement to standard key lock system. Automatic lock-out system is interconnected to the main control system to prevent premature or unauthorized access to interior chamber.	E-LOCK	E-LOCK	E-LOCK	E-LOCK
Uninterruptable Power Supply	Capable of supporting all systems for one complete machine cycle in the event of power failure.	UPS	UPS	UPS	UPS
UV Lamp*	Creates light emission conditions known to permit decontamination of interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	UV-CA	UV-CA	UV-CA	UV-CA

*Includes timer and door microswitch. Safety precautions must be followed.

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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



For details visit the [Warranty section](#) of our website.

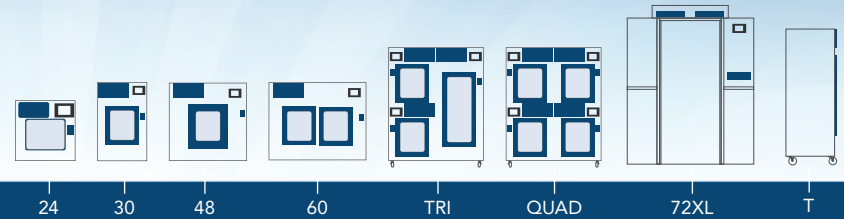
STANDARDS AND COMPLIANCE

Quality Management Systems	ISO 9001:2015
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001:2015 ENERGY STAR® Partner



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Automatic Cyanoacrylate Fuming Chamber

- Safely Obtain Quality Latent Prints and Reproducible Results



SafeFume™ CA30S

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Safefume

Fuming Chamber

24 • 30 • 48 • 60 • TRI • QUAD • 72XL

PRODUCT OVERVIEW

INTRODUCTION

Safefume™ Automatic Cyanoacrylate Fuming Chambers are designed to safely develop latent fingerprints using ethyl cyanoacrylate (CNA) vapor in a controlled environment for optimum effectiveness and safety where moisture and fuming time are critical factors. The tamper resistant compartment helps maintain the chain of custody. The unique Air Science® [Multiplex™ Filtration System](#), together with professional design and unique construction features offer personnel protection during use.

The ductless filtration system requires no connection to an outside exhaust system. The automatic control system programs the fuming cycle. A versatile system of hanging rods and shelves allows proper positioning of items of evidence in the chamber.

APPLICATIONS

Using innovative filtration technology, the Safefume cyanoacrylate fuming chamber creates a safe work environment over the widest range of applications in the industry.

State and Federal Crime Laboratories \ Crime Scene Investigation \ Law Enforcement Agencies \ Medical Examiners' Programs \ Criminal Justice Education

KEY FEATURES

- Choose from multiple sizes, from bench top to floor standing.
- Multi-chamber cabinets available.
- Caster wheels standard on all models except bench top series.
- Optional UV Lamp decontamination.
- Optional side and rear windows for 360° view of development.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted cabinets for a broad range of applications.

Environmental Benefits. Air Science Safefume cyanoacrylate fuming chambers isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. Optional HEPA/ULPA filters can be added for biological safety.

Easy to Install. The cyanoacrylate fuming chamber is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



Safefume CA30S and CA60T. CA30S shown with optional UV lamp.



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

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Safefume

Fuming Chamber

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DESIGN FEATURES



Safefume CA30T, shown open.

DESIGN FEATURES

- A. Filter I.D. Window:** A strategically placed front cover window shows the installed filter part number and installation date for convenience and to encourage timely filter replacement.
- B. Filter Door Key:** Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.
- C. Track and Wheel System:** An efficient filter clamping mechanism allows removal of main filter(s) directly to disposal bag with track and wheel system.
- D. Electrostatic Pre-Filter:** The 99.5% effective electrostatic pre-filter protects and extends the life of the main filter and can be changed without tools while unit is running to prevent operator exposure to captured contaminants.
- E. Dynamic Filtration Chamber:** The dynamic filter chamber prevents leakage of contaminated air by maintaining partial vacuum in the filter plenum.
- F. Control Panel:** The microprocessor control panel manages the Printbuster™ Pro operating sequence with control, oversight and display of all processing functions. The LCD display works with a touchpad data entry keypad to establish all operating parameters.
- G. Doors:** Tempered glass, keyed doors with aluminum frame and tamper proof seal provide improved security, stability and ease of cleaning. Scratch-resistant glass for lasting optimum visibility.
- H. Shelving:** Standard height units include one shelf in a fixed position. Extra tall units include one shelf that is repositionable to fit two configurations.
- I. Fan:** High velocity sparkless and brushless centrifugal fan.
- J. Lighting:** Vapor-proof fluorescent light.

- K. Hanging Rods:** Removable and adjustable stainless steel hanging rod for proper orientation of evidence.
- L. Cool Mist Water Nebulizer/Humidifier:** Programmable to achieve preset humidity conditions quickly and accurately using a replaceable "wicking" filter to eliminate excess cyanoacrylate from building up on the unit.
- M. Hot Plate Accelerator:** Hot plate to polymerize ethyl cyanoacrylate. Air Science also offers optional adjustable temperature hot plates to accommodate a variety of fuming techniques, including MicroBurst™ and typical Super Glue® methods. Hot plates are available with basic knob controls as well as advanced microprocessor controls with LED display.

ADDITIONAL FEATURES

Construction: Models are available in either polypropylene and epoxy coated steel or aluminum frame with plastic wall construction. Doors are tempered glass locking doors with tamper-proof seal and aluminum frame. See selection chart for specifications and dimensions. Available in 110V, 60Hz single phase electrical supply (other voltages available on request).

Optional UV Lamp: Activated ultraviolet light creates light emission conditions known to permit disinfection of the interior between cases to prevent cross-contamination, ensuring integrity of the samples for DNA testing.

Internal Chamber Cleansing: The Internal Chamber Cleansing feature automatically activates to eliminate contamination and remove the harmful vapor from the unit. This process is especially important if the unit is used infrequently or only during certain periods of high evidence volume.

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Safefume

Fuming Chamber

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PERFORMANCE & SELECTION

Each Air Science Safefume cyanoacrylate fuming chamber includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science [Multiplex Filter](#) offers a range of options for high performance protection. The filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

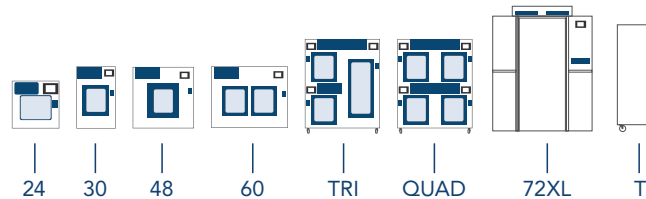
DESIGN

Professional quality Safefume cyanoacrylate fuming chambers comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters, and HEPA/ULPA filters used in our products.



SELECTION

Safefume cyanoacrylate fuming chambers are available in 5 specific sizes and multiple configurations, totaling 20 standard models.

CONTROL

Air Science Printbuster Pro LCD Interface Technology

Printbuster Pro is the industry's first use of touchscreen technology offering a simple, easy-to-use solution delivering repeatable results every time. The automatic latent fingerprint development cycle manages the following:

- Relative humidity setpoint. Relative humidity is established via a water-filled nebulizer/humidifier.
- Cabinet temperature display.
- Door status with lock alarm.
- Circulation fan On/Off.
- Hot plate On/Off. The hot plate accelerator polymerizes ethyl cyanoacrylate for a specific time interval.
- Processing time.

- Purge cycle time. Fumes are removed from the chamber through the Multiplex Filtration System via a carbon filter; air is safely exhausted to the room.
- Emergency stop.
- Filter condition. An optional electronic gas sensor emits an audible and visual warning when the main filter must be changed.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



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FILTRATION

At the heart of the cyanoacrylate fuming chamber is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon or optional HEPA/ULPA filter and safety activated carbon or optional HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on [page 8](#).



Filter disposal services are available in selected markets providing responsible destruction or recycling of saturated filters in authorized facilities.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Safefume can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

- P. Electrostatic Pre-Filter:** Protects the main filters from aerosols, mists, dust and particulates.
- C. Activated Carbon Main Filter:** A single, blended or stacked filter configuration.
- H. Primary HEPA/ULPA Filter, Optional:** Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Primary Filter	C	H	H C	H C
Pre-Filter	P	P	P	P

The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

Safefume

Fuming Chamber

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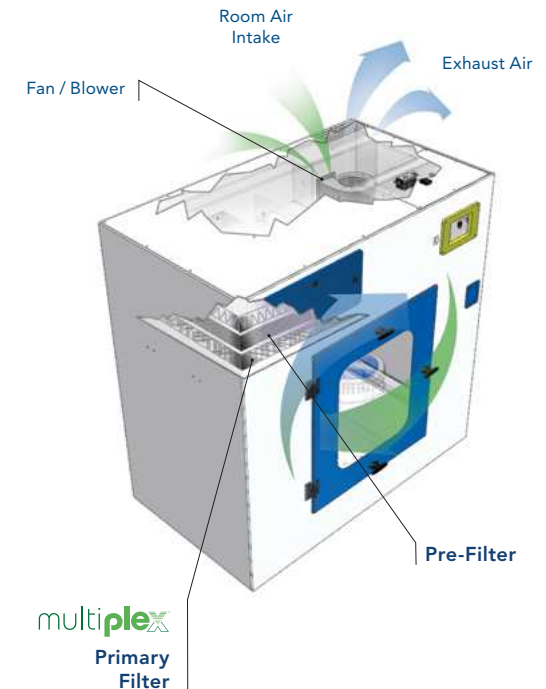
FILTRATION TECHNOLOGY

AIRFLOW

The Safefume fuming chamber maintains a constant face velocity, creating uniform conditions within the chamber. Contaminated air is pulled through the Multiplex Filtration System; clean air is returned to the room.

The main filters are easy to replace and install. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

⚠ The pre-filter may be replaced while unit is in operation.



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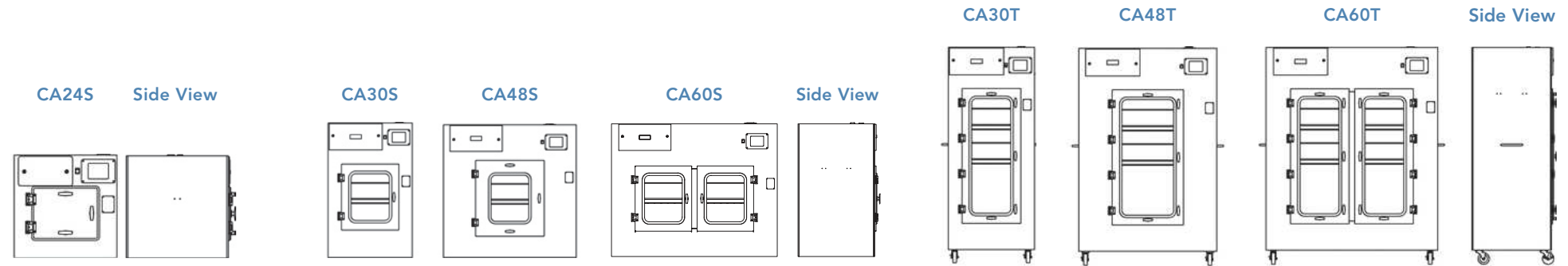
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SafeFume

Fuming Chamber

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SPECIFICATIONS



MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
Benchtop Models					
CA24S	12.8" / 325 mm	24" x 17.4" x 24" / 610 x 441 x 610 mm	40" x 40" x 55" / 1016 x 1016 x 1397 mm	156 / 71	200 / 91
CA30S	36" / 914 mm	30" x 28" x 48.1" / 762 x 711 x 1220 mm	40" x 40" x 55" / 1016 x 1016 x 1397 mm	175 / 79	215 / 98
CA48S	36" / 914 mm	48" x 28" x 48.1" / 1219 x 711 x 1220 mm	58" x 40" x 55" / 1473 x 1016 x 1397 mm	306 / 139	346 / 157
CA60S	36" / 914 mm	60" x 28" x 48.1" / 1524 x 711 x 1220 mm	65" x 40" x 55" / 1651 x 1016 x 1397 mm	369 / 167	407 / 185
Tall Models					
CA30T	57.2" / 1454 mm	30" x 28" x 74.9" / 762 x 711 x 1902 mm	40" x 40" x 91" / 1016 x 1016 x 2311 mm	271 / 123	316 / 143
CA48T	57.2" / 1454 mm	48" x 28" x 74.9" / 1219 x 711 x 1902 mm	58" x 40" x 91" / 1473 x 1016 x 2311 mm	327 / 148	367 / 166
CA60T	57.2" / 1454 mm	60" x 28" x 74.9" / 1524 x 711 x 1902 mm	70" x 40" x 91" / 1778 x 1016 x 2311 mm	382 / 173	447 / 203

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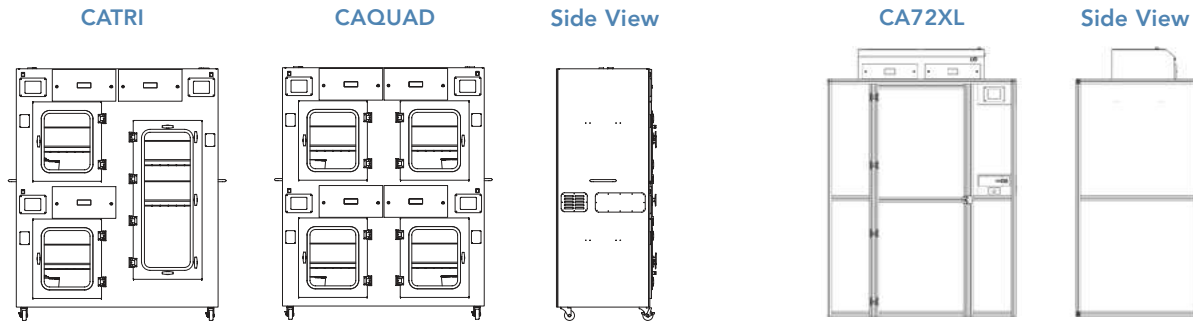
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- Specifications (p.6)
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SafeFume

Fuming Chamber

24 • 30 • 48 • 60 • TRI • QUAD • 72XL

SPECIFICATIONS



MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship

Standard Triplex Model*

Three-chamber floor model includes three individual compartments with independent controls and ductless carbon filters.

CATRI	2 @ 24" / 610 mm	1 @ 57.2" / 1454 mm	60" x 27.75" x 75" / 1524 x 705 x 1905 mm	70" x 40" x 91" / 1778 x 1016 x 2311 mm	402 / 182	467 / 212
-------	------------------	---------------------	---	---	-----------	-----------

Standard Quad Model*

Four-chamber floor model includes four individual compartments with independent controls and ductless carbon filters.

CAQUAD	4 @ 24" / 610 mm	60" x 27.75" x 75" / 1524 x 705 x 1905 mm	70" x 40" x 91" / 1778 x 1016 x 2311 mm	418 / 189	476 / 216
--------	------------------	---	---	-----------	-----------

Aluminum Frame Walk-in Model

High-volume, stand-alone fingerprint chamber designed for departments that must process large amounts of evidence on a regular basis. Large items such as automobile doors, tires, bicycles, etc. can be easily processed in this unit. Offers the same functionality as smaller fuming chambers including the Printbuster Pro control system.

CA72XL	1 @ 80" / 2032 mm	72" x 47.3" x 86" / 1829 x 1200 x 2184 mm	80" x 54" x 95" / 2032 x 1372 x 2413 mm	825 / 374	968 / 439
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* Specifications are subject to change without notice.

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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PRODUCT SPECIFICATIONS

	CA24S CA30S CA48S CA60S	CA30T CA48T CA60T	CATRI	CAQUAD	CA72XL
Filtration					
Airflow	145 cfm	145 cfm	145 cfm	145 cfm	145 cfm
Construction	CA24S CA30S CA48S CA60S	CA30T CA48T CA60T	CATRI	CAQUAD	CA72XL
Finish	<... White polypropylene and epoxy coated steel. ...>				Aluminum frame with tempered glass walls.
Blower	<... Centrifugal blower. ...>				
Controls	<... Main On/Off. ...>				
Monitoring	<... Complete full monitoring of all functions. ...>				
Shelving	Single, fixed position.	Single, two position.	<... Single, per compartment. ...>		Optional.
Efficiency	CA24S CA30S CA48S CA60S	CA30T CA48T CA60T	CATRI	CAQUAD	CA72XL
Lighting	<... (2) 15 watts. ...>				

FILTER SPECIFICATIONS

SafeFume Model	CA24S CA30S CA48S CA60S	CA30T CA48T CA60T	CATRI	CAQUAD	CA72XL
Primary Filter(s)*	(1)	(1)	(3)	(4)	(1)
Pre-Filter*	(1)	(1)	(3)	(4)	(1)

* For specific examples refer to Multiplex Filtration System summary on [page 5](#).

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.

*Other formulas may be available.

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SafeFume

Fuming Chamber

24 • 30 • 48 • 60 • TRI • QUAD • 72XL

OPTIONS & ACCESSORIES

OPTIONS & ACCESSORIES

SafeFume Model		CA24S	CA30S	CA48S	CA60S	CA30T CA48T CA60T	CATRI	CAQUAD	CA72XL
Heavy Duty Base Stand	Provides a lower storage half shelf; accommodates wheelchair access. Locking casters fix the chamber in place. 34" tall.	CART-25	CART-30	CART-50	CART-60	--	--	--	--
Advanced Hot Plate	Advanced hot plates heat up to 400°C and offer micro-processor controls and LED display with enhanced safety features. Low profile design has a maximum capacity of 600 mL. All aluminum construction. Available in 110V or 230V configurations.	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230	AHOTPLATE110 or AHOTPLATE230
UV Lamp*	Creates light emission conditions known to permit decontamination of interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	UV-CA	UV-CA	UV-CA	UV-CA	UV-CA	UV-CA	UV-CA	UV-CA

*Includes timer and door microswitch. Safety precautions must be followed.

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SafeFume

Fuming Chamber

24 • 30 • 48 • 60 • TRI • QUAD • 72XL

OPTIONS & ACCESSORIES

WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



For details visit the [Warranty section](#) of our website.

STANDARDS AND COMPLIANCE

Quality Management Systems	ISO 9001:2015
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001:2015 ENERGY STAR® Partner



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Schedule
Contract GS-07F5032P





Purair[®] FLEX Series Portable Isolator

- Versatile Design for Pharmaceutical, Forensic, Biological and Aerospace Applications
- Full View Interior with Superior Containment for Protection of Product, Personnel and the Environment



Purair FLEX-30

CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Specifications (p.4)

INTRODUCTION

The Purair FLEX is a revolutionary containment product that expands where, when and how glove bags can be used. Flexible and highly portable, the Purair FLEX permits easy set up and delivers superior containment capability. The ArmorFlex[®] film construction assures visual clarity and excellent solvent resistance across a range of chemicals.

APPLICATIONS

Pharmaceutical Processing \ Forensic Investigation and Processing \ Industrial Cleaning \ Biological Containment \ Aerospace



KEY FEATURES

Spacious Interior Volume. An innovative curved film design provides more working volume than any other glove bag on the market.

Easy Setup. Semi-rigid support rods simplify set up and increased stability even if the bag is not inflated to full pressure.

Large Workspace. At 30" (762 mm) wide and an internal volume of 3 cu.ft. (85 L) the Purair FLEX provides a large work area with a 12.5" (317 mm) gas tight zippered access with a 6" (152 mm) diameter opening.

Oxygen-Free Work Zone. A nitrogen gas feature to permit creation of an oxygen-free workspace.

PERFORMANCE ADVANTAGE

Air Science provides containment solutions to meet any analytical need. The Purair FLEX glove bag provides numerous performance advantages over the competition.

Compliant with Multiple Criteria. ArmorFlex film complies with FDA 21 CFR and 2002/72/EC standards for minimal outgassing, solvent and biological reactivity and static resistance.

Pharmaceutical Grade Materials. The Purair FLEX is constructed with FDA approved pharmaceutical grade LLDPE1 anti-static and ESD2 safe and meets European ATEX Directive.

Standard Features. Closed HEPA filtration, bag-in/bag-out port and Nitrogen purge inlet connections enhance safety to meet specific needs.

Bag-In/Bag-Out Port. A 14" (355 mm) x 24" (609 mm) bag-in/bag-out minimizes exposure to contaminants when changing the filter. The contaminated filter is safely removed through the port and placed into a bag, sealed with a reusable cable tie and disposed. A new bag is affixed to the port when the replacement filter is installed.



ARMORFLEX 113 AND 114

The Purair FLEX is constructed of ArmorFlex[®] 113 and 114 films. These high performance films provide sufficient protection from a variety of contaminant types. Additional benefits include:

- Five-year shelf life
- No incineration or out-gassing concerns
- Tested for solvent resistance
- Superior visual clarity and excellent solvent resistance
- FDA 21 CFR compliant (114)
- Fully compliant to 2002/72/EC and amendments (114)
- Meets test parameters of EP 3.1.3 (114)
- No BADGE, BFDGE, or NOGE materials used
- No phthalates, latex, or silicone used
- No migrating anti-static additives

Durable ArmorFlex[®] film construction assures visual clarity and excellent solvent resistance across a range of chemicals.

This product exceeds OSHA, ANSI and other International Certification Standards.
Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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Product Overview (p.2)

● Design Features (p.3)

Specifications (p.4)



The Purair FLEX shown under positive pressure. Gas-tight zipper access (A) and HEPA filtration port (D) protect personnel and the environment.

DESIGN FEATURES

- A. Angled Zipper Entry:** Gas tight 12.5" (317 mm) zipper with an effective 6" (152 mm) diameter opening.
- B. Sealed Ambidextrous Gloves:** Allow maximum protection and one size fits all design.
- C. Bag-Out:** Includes 14" x 24" (355 x 609 mm) bag-out port with reusable cable tie.
- D. HEPA Filtration:** 3M 2097 P100 particulate filter certified 99.97% efficient at removing solid and liquid particles, including those containing oil. Composed of 3M's Advanced Electret[®] media, the filter provides a lightweight, easy breathing combination better than fiberglass. The filter meets NIOSH P-series test criteria and is flame and water resistant.
- E. Nitrogen Barb:** Standard feature to allow users to create oxygen-free workspaces.
- F. Internal Support Rods:** Internal FDA-compliant polypropylene support rods provide structure stabilization even when bag is not fully inflated.
- G. Carrying Handle:** Folds flat when not in use.

ADDITIONAL FEATURES

Puncture Resistant Construction: Pliable, solvent resistant ArmorFlex[®] film is (8 mm) thick to prevent accidental punctures.

This product exceeds OSHA, ANSI and other International Certification Standards. Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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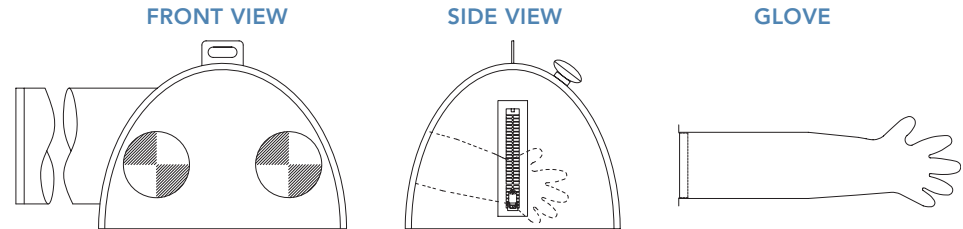
● Specifications (p.4)

MATERIAL AND COMPARATIVE RESISTANCE

CHEMICAL	PURAIR FLEX WITH AMORFLEX®	PVC (POLYVINYL CHLORIDE)
Acetone	Excellent	Poor / Not recommended
Butyl Acetate	Very good	Poor / Not recommended
Dichloromethane	Very good	Poor / Not recommended
Diethylether	Excellent	Poor / Not recommended
Dimethylformamide	Excellent	Poor / Not recommended
Ethanol	Excellent	Fair
Ethyl Acetate	Very good	Poor / Not recommended
HCl (37%)	Excellent	Good
Isopropanol	Excellent	Excellent
Methanol	Excellent	Excellent
Tetrahydrofuran	Excellent	Poor / Not recommended
Toluene	Very good	Poor / Not recommended

OPERATING CONDITIONS

Operating Temperature Range	Standard single piece polyethylene gloves
Static Storage Temperature Storage Range	Polypropylene rods, white
Humidity Range	Gas tight
Melt Temperature	750 pa



MODEL	DIMENSIONS	WEIGHT (LBS/KG)	
	External (W x D x H)	Net	Ship

PURAIR FLEX

FLEX-30	30" x 26" x 20" / 762 x 660 x 508 mm	3 / 1.5	9 / 4
---------	--------------------------------------	---------	-------

PRODUCT SPECIFICATIONS

PURAIR FLEX MODEL

Construction Bag Film	8 mil Clear ArmorFlex polyethylene
Construction Base	20 mil Clear ArmorFlex polyethylene
Sleeve Film	4 mil Tapered anti-static polyethylene, 17" (450 mm) long, frosted
Gloves	4 mil Standard single piece polyethylene gloves
Support Frame	Polypropylene rods, white
Zipper	Gas tight, 12.5" long
Pressure Test	750 pa
Breather HEPA Filter	3M 2097 P100 particulate filter, rear wall mounted
Nitrogen Gas Inlet PORT	½" slide wall mounted
Bag-in/Bag-Out Port	14" (355 mm) diameter with reusable cable tie

This product exceeds OSHA, ANSI and other International Certification Standards.

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SPECIFICATIONS

WARRANTY

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34S

Fingerprint Development Chamber

- Detect Quality Latent Prints on Porous Surfaces with Reproducible Results



SD-34S
with optional Vent-Box



"The World's Most Extensive Selection of Containment Solutions."



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INTRODUCTION

Safedvelop™ Fingerprint Development Chambers are designed to accelerate the processing of latent fingerprints on porous surfaces using DFO, Ninhydrin and other development chemicals within a controlled environment for optimum effectiveness where moisture, temperature and time are critical factors.

Safedvelop Fingerprint Development Chamber controls all functions from start-to-finish, permitting the investigator to initiate an unattended cycle, establish the proper development intensity and duration, and to return upon completion to collect results. The resulting prints will fluoresce with the use of various lasers and light sources.



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion, and quality output from a United States-based company with a domestic and global reach.

Safedvelop
Fingerprint Development Chamber

34S

PRODUCT OVERVIEW

APPLICATIONS

Using innovative filtration technology, the Safedvelop Fingerprint Development Chamber creates a safe work environment over the widest range of applications in the industry.

State and Federal Crime Laboratories \ Crime Scene Investigation \ Law Enforcement Agencies \ Medical Examiners' Programs \ Criminal Justice Education

KEY FEATURES

- The professionally designed automatic development chamber eliminates reliance on do-it-yourself systems that lack user-safety allowances and controls needed for repeatable results.
- To change between profiles requires only the press of a few buttons on an easy to use LED display.
- The chamber features rapid condition recovery following a door opening.
- The wide temperature and humidity range allows fingerprints to be processed in a matter of minutes - not days like some conventional methods.
- The steam generator produces humidity by a sealed, automatic, steam injection system, ensuring only vaporized water enters the sample chamber to eliminate the possibility of contaminating samples with water droplets.
- The chamber's generous working area and flexible shelving and rod system enable large batches of operational material to be processed quickly and easily.

SAFEDEVELOP TECHNOLOGY

DFO and Ninhydrin fuming are the most effective techniques for detecting latent prints on paper and similar porous surfaces. Safedvelop performs well with DFO and Ninhydrin, however is not limited in scope and can also utilize other chemical developers, allowing illumination with various lasers and light sources to make the resulting prints fluoresce.

Development Chamber Process Table on [page 6](#).

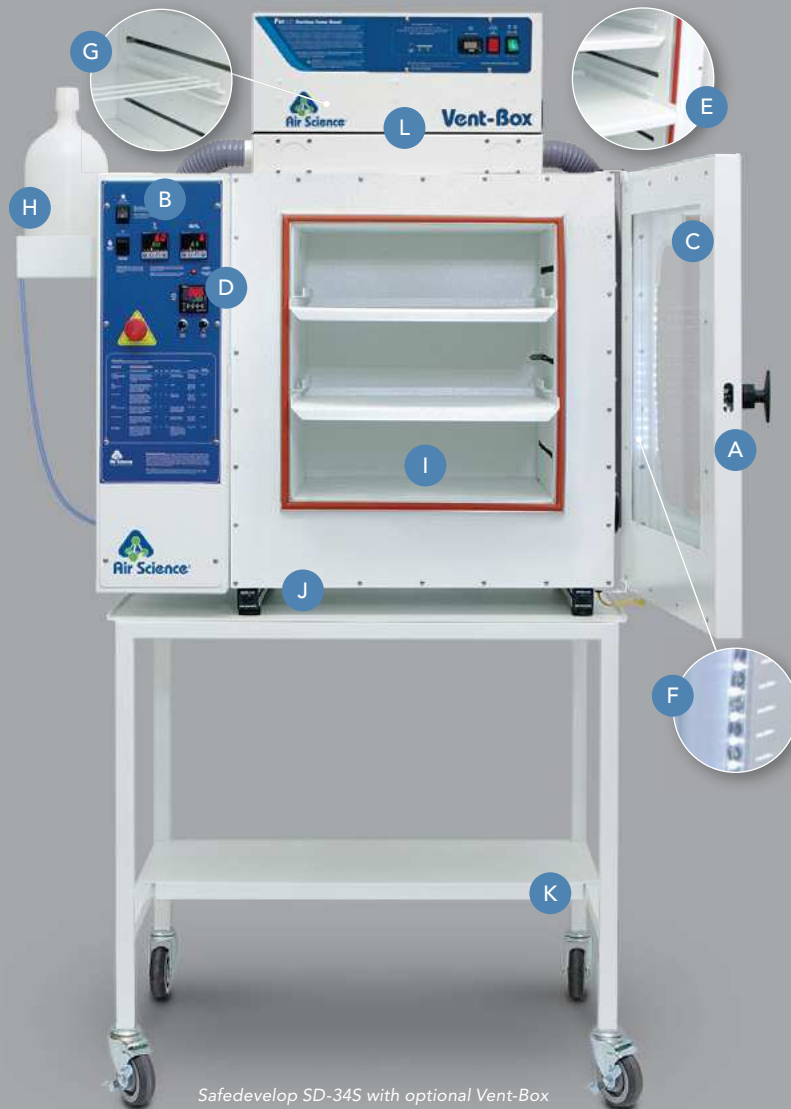


Safedvelop SD-34S

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Safedvelop SD-34S with optional Vent-Box

DESIGN FEATURES

- A. Door Key:** Chamber access keys prevent unauthorized removal of evidence or accidental operator exposure to chemical fumes or high heat.
- B. Control Panel:** Front-mounted control panel with electronic On/Off switch, lights, temperature and humidity controller, cycle complete lamp and low water alarm lamp.
- C. Glass Door:** Multi-pane, heated glass door minimizes condensation and activates automatically whenever humidity is used.
- D. Low Water Light:** Low water level warning light notifies the operator when to add water.
- E. Push-Pull™ Shelving:** Perforated Push-Pull™ shelves can slide in or out with one hand.
- F. Lighting:** Dual LED light strips on the door provide a large illumination area to watch fingerprints being developed.
- G. Hanging Rods:** Removable stainless steel hanging rods with clips.
- H. Water Carboy:** Side mounted, 1 gallon (4 liter). Easy to visualize water levels and quick release coupling for simple removal and filling.
- I. Chamber:** Corrosion-resistant insulated internal chamber.
- J. Levelling:** Adjustable leveling feet.
- K. Stand:** Optional mobile cart with locking casters.
- L. Modular Filtration:** Optional Vent-Box™ filtration unit available with Multiplex™ filtration technology, a unique configuration that includes a pre-filter and main carbon filter.

ADDITIONAL FEATURES

Quality Door Construction: The large viewing area offers easy observation of critical samples along with dual vertical LED lights. The multi-pane, heated glass door minimizes condensation.

Steam Generator: The Air Science® steam generator adds heat while humidifying, providing for quick ramp-up and rapid condition recovery after door openings. Advanced humidity sensors with built-in temperature compensation provide accurate readings at all temperatures.

Preset Profiles: Safedvelop cabinets are constructed of polypropylene that does not absorb liquids, is easily cleaned with household detergents and can be sprayed with a 10% bleach solution to eliminate biological contaminants.

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Each Air Science Safedvelop Fingerprint Development Chamber includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science [Multiplex Filtration System](#) offers a range of options for high performance protection.

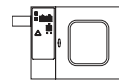
DESIGN

Professional quality Air Science Safedvelop Fingerprint Development Chambers comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access, easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



34S

SELECTION

Fingerprint development chambers are available in 2 electrically specific sizes, totaling 2 standard models.



Safedvelop SD-34S with optional Vent-Box



FSA/Autocal Control Panel with On/Off switch for unit, lights, temperature and humidity controller, cycle complete lamp and low water alarm lamp. Also incorporates profile select and emergency stop switches to ensure complete unit control.

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Safedevelop
Fingerprint Development Chamber

345

FILTRATION TECHNOLOGY



FILTRATION

At the heart of the optional Vent-Box product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

SECUR.
safe disposal service



Filter disposal services are available in selected markets providing responsible destruction or recycling of used saturated filters in authorized facilities.

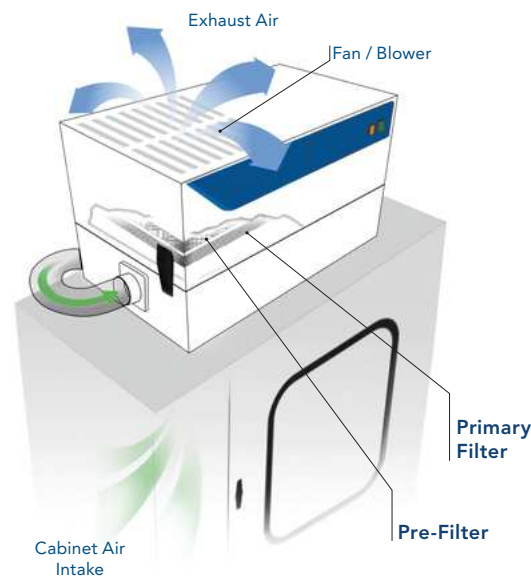
FILTER CONFIGURATION

The vented chemical storage cabinet can be equipped with a single activated carbon main filter activated to adsorb one or more specific vapors or family of vapors.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

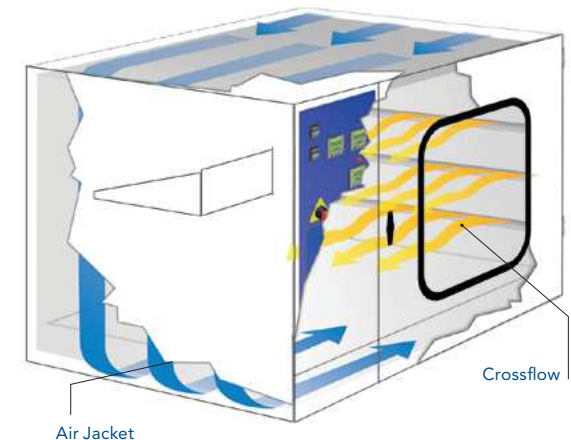
P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single filter configuration.



AIRFLOW

The optional Vent-Box filtration unit maintains a constant face velocity in compliance with USA and international standards for safety and performance, creating uniform conditions within the chamber. Contaminated air is pulled through the Multiplex Filtration System; clean air is returned to the room.



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PROCESS TYPE	DEVELOPMENT CHAMBER PROCESS TABLE - PROFILE SET UP CHARACTERISTIC						
	Evidence Preparation	Temp C°	RH %	Time (min)	Print Results	Photography	Unit Profile
Ninhydrin (2,2-Dihydroxyindane-1, 3-dione)	Follow proper safety precautions. Using a fume hood, apply chemical to specimen (spray, dip, brush). Completely dry before processing in chamber.	80	65	3	Purple. Repeat process as needed.	530-555 nm light source with no filter	Ninhydrin
DFO (1,8-Diazafluoren-9-one)	Follow proper safety precautions. Using a fume hood, apply chemical to specimen (spray, dip) for 5 seconds. Completely dry before processing in chamber.	100	–	20	Yellow.	495-550 nm light source with orange filter	DFO
Nickel Nitrate	Apply only after processing specimen with Ninhydrin. Follow proper safety precautions. Using a fume hood, apply chemical to specimen (spray). Completely dry before processing in chamber.	80	65	20	Ridge detail enhancement.	Green filter or 530 nm light source with no filter	Ninhydrin
5-MTN (5-Methylthioninhydrin)	Follow proper safety precautions. Using a fume hood, apply chemical to specimen (spray, dip) for 5 seconds. Completely dry before processing in chamber.	80	65	3	Strong purple, repeat if needed or try with Nickel Nitrate. Repeat process as needed.	Green filter	Ninhydrin
1,2-Indanedione	Follow proper safety precautions. Using a fume hood, apply chemical to specimen (spray, dip, wash). Completely dry before processing in chamber.	100	–	10	Pale pink. Repeat process as needed.	515 nm light source with orange filter	DFO
Zinc Chloride	Apply only after using Ninhydrin or 5-MTN to enhance prints. Follow proper safety precautions. Using a fume hood, apply chemical to specimen. Completely dry before processing in chamber.	80	65	20-40	Orange if prints previously treated with Ninhydrin. Red if prints previously treated with 5-MTN. Repeat process as needed.	Orange filter	Ninhydrin

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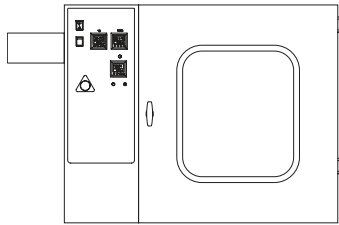
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Safedvelop
Fingerprint Development Chamber

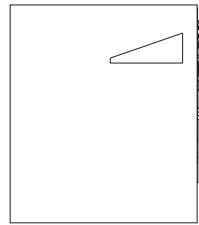
34S

SPECIFICATIONS

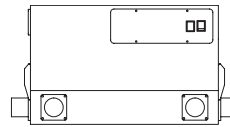
SD-34S



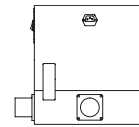
Sideview



VB60



Sideview



MODEL	DIMENSIONS				WEIGHT (LBS/KG)	
	Internal Height	Work Space (W x D x H)	External (W x D x H)	Shipping (W x D x H)	Net	Ship
Safedvelop						
SD-34S	19.5" / 495 mm	18.25" x 20.5" x 19.6" / 464 x 521 x 495 mm	36.25" x 25.5" x 29.25" / 921 x 648 x 743 mm	40" x 48" x 45" / 1016 x 1219 x 1143 mm	200 / 91	245 / 111
VB60 (optional)	–	–	21.25" x 12" x 13" / 540 x 305 x 330 mm	24" x 22" x 18" / 610 x 559 x 457 mm	32 / 14	34 / 15

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PRODUCT SPECIFICATIONS

Construction

Airflow	<... Crossflow. ...>
Controls	<... Programmable heat and humidity controllers. Lights On/Off. ...>
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. ...>
Monitoring	<... Audio and visual, timer cycle complete, low water level. ...>
Lighting	<... LED. ...>
Temperature Range	<... Up to 100°C (depends on profile). ...>
Relative Humidity	<... Up to 65% RH (depends on profile). ...>
Shelves	<... 2 Push-Pull, perforated on sliding rails. ...>
Hanging Rods	<... 4 stainless steel rods with 8 clips. ...>
Alarms (Audio and Visual)	<... Timer Cycle Complete, Low Water Level. ...>
Water Bottle	<... Carboy, water fill bottle with cap, 1 gallon (4 liters). Universal side mount holder mounts on side or top of unit. Includes all tubes and quick release fittings. ...>

Specifications are subject to change without notice

FILTER SPECIFICATIONS

Safedevelop Model

34S with Optional Vent-Box Only

Primary Filter*	(1)
Pre-Filter*	(1)

* For specific examples refer to Multiplex filtration system summary on [page 5](#).



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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OPTIONS & ACCESSORIES

Safedvelop Model		SD-34S
Vent-Box Filtration	Modular ductless filtration system. Utilizes the Multiplex carbon filtration system with a pre-filter and main filter. Optional HEPA/ULPA filters are also available.	VB60
Heavy Duty Base Stand	Provides a lower storage half shelf; accommodates wheelchair access. Locking casters.	CART-30

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- Performance & Selection (p.4)
- Filtration Technology (p.5)
- Specifications (p.6)
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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

STANDARDS & COMPLIANCE

Quality Management Systems	ISO 9001 : 2015
Environment	ISO 14001: 2015 ENERGY STAR® Partner



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UV-Box™



Benchtop Decontamination Chambers

- Fast DNA Decontamination with High Intensity UVC Radiation
- Designed for Simplicity and Efficiency

UVB-15



"The World's Most Extensive Selection of Containment Solutions."



CONTENTS:

- Product Overview (p.2)
- Specifications (p.3)
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UV-Box™

Decontamination Chamber

15

PRODUCT OVERVIEW

INTRODUCTION

The UV-Box™ is a high-efficiency chamber designed to create light emission conditions known to safely decontaminate contents while providing a safe work environment for the operator. High intensity UV lamps are positioned within the cabinet producing short wave ultraviolet light at 254 nm creating light emission conditions known to destroy exposed surface DNA and bacteria, leaving evidence free of contamination prior to other forensic tests, analysis or procedures.

APPLICATIONS

Forensics \ Pharmaceutical \ Veterinary \ Dental



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

KEY FEATURES

- 254 nm UV lamps create light emission conditions known to destroy all exposed DNA and bacteria on items within the chamber.
- UV timer allows user to set specific decontamination time and cycle.
- Key locked, UV absorbing, transparent window with safety interlock.
- Smooth internal stainless steel walls for easy cleaning and sterilization.

ADDITIONAL FEATURES

- UV lamps are optimally placed to eliminate blind spots and corners and walls are smooth to ensure easy cleaning. Stainless steel surfaces naturally reflect UVC radiation to ensure contents are fully irradiated from all directions.
- Professional design and construction features offer convenience and protect the safety of personnel during use, cleaning and maintenance of the cabinets.
- The operator is protected from UVC radiation by the UV absorbing window and with safety controls to ensure that lamps cannot be activated until the cabinet door is securely closed.
- Other features include a hanging rod and shelf to support or suspend items for decontamination.



DESIGN FEATURES

- A. 254 nm UV lamps create light emission conditions known to destroy all exposed DNA and bacteria on items within the chamber.
- B. UV timer allows user to set specific decontamination time and cycle.
- C. Key locked, UV absorbing, transparent window with safety interlock.
- D. Smooth internal stainless steel walls for easy cleaning and sterilization.

This product exceeds OSHA, ANSI and other International Certification Standards. Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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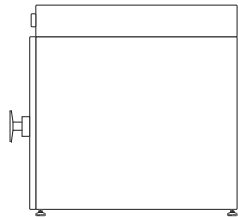
Specifications (p.3)

Warranty (p.4)

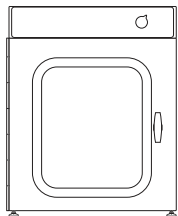
UV-Box™

Decontamination Chamber 15

SPECIFICATIONS



Side View



UVB-15

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
UVB-15	12.5" / 318 mm	15.25" x 20.5" x 19" / 387 x 521 x 483 mm	20" x 22" x 22" / 508 x 559 x 559 mm	35 / 16	41 / 19

PRODUCT SPECIFICATIONS

Construction		UVB-15
Finish	<... Stainless steel. ...>	
Door	<... Key locked, UV absorbing transparent window with safety interlock. ...>	
UV Timer	<... Adjustable 0-60 min. ...>	
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available ...>	
Hanging Rods with Clips	<... Standard ...>	
Efficiency		UVB-15
UV Lamps	<... 3 x 254 nm 60 watt bulbs emitting 52.5 watts of UVC radiation. ...>	

OPTIONS & ACCESSORIES

Shelf	Removable shelf allows for multiple levels of items to be placed inside the box	UVB-SHELF
Fingerprint Brush Holding Rack	Metal support rack holds fingerprint brushes upright to enhance UV decontamination of bristles	UVB-RACK

STANDARDS & COMPLIANCE

Quality Management Systems	ISO 9001:2015
Electrical Safety	CE Mark (230v models only) RoHS Exempt under EEE Category 9
Environment	ISO14001:2015 ENERGY STAR® Partner

This product exceeds OSHA, ANSI and other International Certification Standards.
Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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UV-Box™

Decontamination Chamber

15

SPECIFICATIONS

WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



For details visit the [Warranty section](#) of our website.

SAFETY WARNING

Even with the benefits they provide, germicidal ultraviolet lamps pose imminent danger if used without taking the proper precautions. You **MUST** avoid exposure to direct or reflected germicidal ultraviolet rays, since they cause painful eye irritation and reddening of the skin. In order to use our direct germicidal UVC products, you **MUST** wear personal protection equipment—gloves, a long sleeve shirt with no gaps between cuffs and gloves and an ultraviolet-blocking face shield to protect eyes and exposed skin. Under no circumstances should any direct germicidal UVC unit be permitted to operate with humans, plants or animals present in the operation area.



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Schedule
Contract GS-07F5032P



UV-Box™

UV Decontamination Chamber

- Designed for Ultraviolet Germicidal Irradiation (UVGI) Decontamination and Reuse (DR) Devices
- Portable Lab Grade N95 Filtering Face Respirator (FFR)
- UV Surround for High Intensity Exposure Masks and Small Items
- Tunnel Design for Easy Loading, High Throughput



UVB-40



"The World's Most Extensive Selection of Containment Solutions."

Important: Air Science® USA LLC does not provide direction on decontamination of FFRs. Air Science has designed a commercially available laboratory grade FFR-DR UVGI device based on UVGI criteria outlined in the Final Report, Research to Mitigate a Shortage of Respiratory Protection Devices During Public Health Emergencies, by Applied Research Associates Inc, on behalf of the United States Food and Drug Administration (FDA), under contract number HHSF223201400158C.



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UV-Box™
Decontamination Chamber

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PRODUCT OVERVIEW

INTRODUCTION

The UV Decontamination Chamber is a high-efficiency tunnel enclosure designed to create light emission conditions known to safely decontaminate masks and other small items while providing a safe work environment for the operator. The tunnel contains UV lamps positioned within the chamber which emit shortwave ultraviolet light at 254 nm known to create light emission conditions to destroy exposed surface viruses and bacteria.

APPLICATIONS

Hospitals \ Pharmacies \ Clinics \ Food Service



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

KEY FEATURES

- Eight 254 nm UV lamps surrounding the grated loading tray create light emission conditions known to destroy exposed viruses and bacteria on items placed within the chamber.
- Microprocessor control with color viewscreen provides programming capabilities, status and safety functions.
- A tray interlock interrupts operation in the event of an accidental opening.
- Both HEPA and activated carbon filters capture pathogens and vapors emitted as a byproduct of decontamination, protecting the user and the environment.

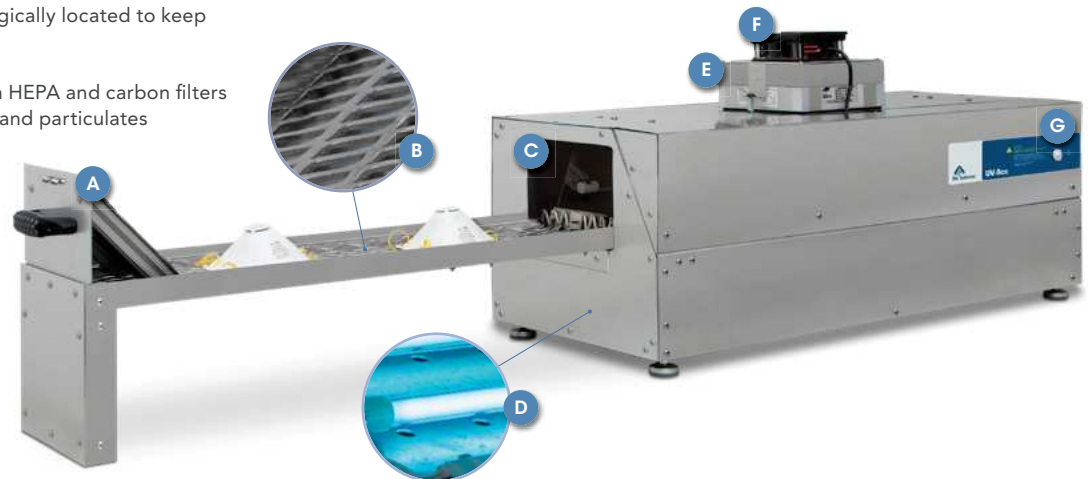
DESIGN FEATURES

- A. Easy slide stainless steel drawer with tray.
- B. Perforated tray for maximum exposure of contents to UV light.
- C. UV lamp chamber with light-tight door.
- D. Natural airflow inlet is strategically located to keep each UV bulb cool.
- E. Negative airflow system with HEPA and carbon filters scrubs exhaust air of vapors and particulates and cools each bulb to extend bulb life.

- F. Air is drawn through a HEPA filter exhaust for operator protection.
- G. UV timer allows user to set specific decontamination time and cycle.

ADDITIONAL FEATURES

- UV lamps are strategically positioned to assure uniform irradiation surrounding the tray load.
- The loading drawer slides completely in and out for loading and unloading.
- Professional design and construction features enhance user convenience, ergonomic operation and easy cleaning.
- Simplified components reduce maintenance. HEPA and carbon filters and UV lamps are easily accessible for replacement.
- Laboratory grade T316 stainless steel construction withstands high demand processes.



This product exceeds OSHA, ANSI and other International Certification Standards. Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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UV-Box™

Decontamination Chamber

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UV TECHNOLOGY

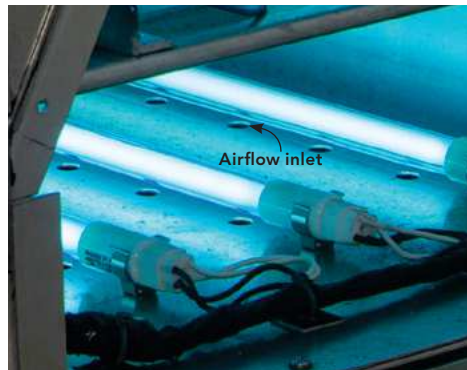
UVSurround

UV TECHNOLOGY

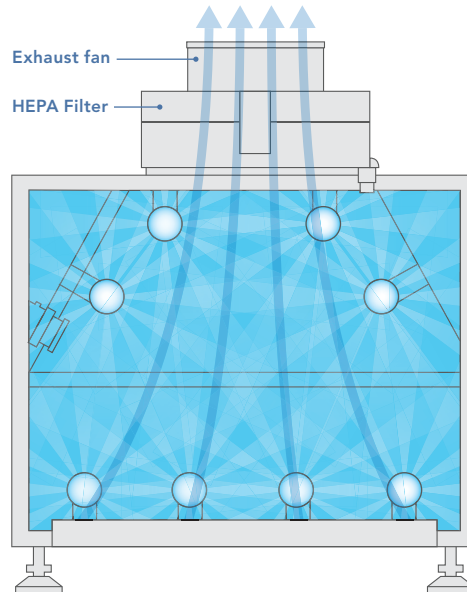
UV lamps generate a narrow 254 nm bandwidth emission which is toxic when directly applied to microorganisms, but outside the 185 nm bandwidth which generates ozone toxicity. Ultraviolet light affects DNA by causing Pyrimidine dimers to form when adjacent Pyrimidine bases on the DNA strand become covalently linked (i.e. chemically bonded to one another). The dimer disrupts the normal replication of the DNA or transcription to make protein. Lamp ON time is determined by the user and generally accepted protocols.

EXCEPTIONS

Before using, laboratory and facility safety officers must establish acceptable processes and procedures that account for material compatibility with UV light. Many plastics and other materials do not tolerate prolonged exposure. Frequency of decontamination cycles and observation of material degradation should be documented before placing the chamber into service. The UV chamber provides surface decontamination only and does not offer sterilization typical of autoclaves or steam sterilizers with vacuum and pressure cycles capable of reaching into wrapped goods or other porous materials.



Natural airflow inlet is strategically located to keep each UV bulb cool.



Air is drawn through a HEPA filter exhaust for operator protection.

CONTROL

Optional intuitive color touchscreen controls manage all user inputs and performance. Functions include programmed ON cycle time with repeat memory, 1 to 15 minute dwell times and cycle countdown. The controller retains cycle lamp life elapsed and remaining to help plan for replacement. Password protection prohibits unauthorized use.



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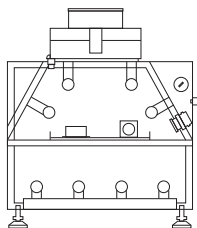
- Product Overview (p.2)
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UV-Box™

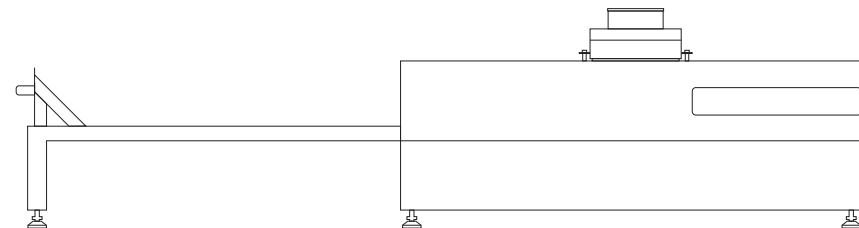
Decontamination Chamber

40

SPECIFICATIONS



UVB-40



Side View

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship
UVB-40	11.25" / 286 mm	56.60" x 16.25" x 19" / 1438 x 413 x 483 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	35 / 16	95 / 43

OPTIONS & ACCESSORIES		
Base Stand, Mobile, With Casters	The mobile cart provides a lower storage shelf; accommodates wheelchair access. Locking casters fix the unit in place.	CART-70
UV Surround Controller	Intuitive color touchscreen that manages all user inputs and performance.	UV-SURD

PRODUCT SPECIFICATIONS

Construction

UVB-40

Finish	<... Stainless steel. ...>
Door	<... Sliding stainless steel drawer with tray ...>
UV Timer	<... Adjustable 0-4 min. ...>
Electrical	<... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available ...>

Efficiency

UVB-40

UV Lamps	<... 8 x 254 nm 60 watt bulbs emitting 52.5 watts of UVC radiation. ...>
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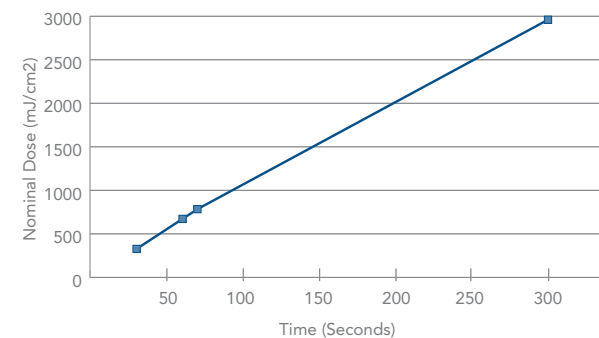
UV EXPOSURE, NOMINAL

Unit	Maximum	Minimum	Average
mW/cm ²	10.941	10.900	10.993

UV irradiation measured from the tray, center during a 5 minute cycle suggests that the system is sufficient to destroy pathogens on facemasks and other items comprised of materials that will tolerate UV radiation.

Source: [ajicjournal.org/article/S0196-6553\(18\)30140-8/pdf](https://ajicjournal.org/article/S0196-6553(18)30140-8/pdf)

AGGREGATE RADIATION



Seconds	30	60	70	300
mJ/cm ²	327	672	784	2,960

The aggregate radiation produced by the UV lamps is dependent on time. A proximate value is illustrated above.

This product exceeds OSHA, ANSI and other International Certification Standards. Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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UV-Box™

Decontamination Chamber

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RESOURCES

RESOURCES

Information associated with UV decontamination are available from the following sources. Content from these websites is owned by their respective publishers and Air Science LLC, USA is not responsible for updates or changes.

CDC - Decontamination and Reuse of Filtering Facepiece Respirators:

cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html

NIH Study Validates Decontamination Methods For Reuse Of N95 Respirators:

nih.gov/news-events/news-releases/nih-study-validates-decontamination-methods-re-use-n95-respirators

A Scientific Consortium For Data-Driven Study Of N95 Filtering Facepiece Respirator Decontamination:

n95decon.org

USER INFORMATION

As of product launch: (i) no regulatory agency that we are aware of has approved or cleared decontaminated FFRs for use in the US; and (ii) manufacturers of FFRs have not provided approval to use the decontamination techniques discussed on their products. Air Science USA LLC. in no way represents or warrants the effectiveness on these decontamination techniques nor its products for any purpose whatsoever. We do not recommend any particular course of action. A decision as to whether or not to decontaminate and reuse FFRs should be made in careful consideration with your legal, medical and public health advisors after considering all available information sources. The FDA does not endorse or guarantee the efficacy of any method, product, and/or data or potential applications described in the report HHSF223201400158C for FFR-DR, including Air Science products. Additionally, the views expressed in report HHSF223201400158C are those of the authors and do not necessarily represent those of the U.S. Food and Drug Administration nor should they be interpreted as official Agency policy or guidance. The article referenced is for information purposes only and does not validate the performance of any Air Science products in relation to FFR-DR.

ADDITIONAL INFORMATION SOURCES

1. Mills, Devin, Delbert A. Harnish, Caryn Lawrence, Megan Sandoval-Powers, and Brian K. Heimbuch. "Ultraviolet germicidal irradiation of influenza-contaminated N95 filtering facepiece respirators." *American journal of infection control* 46, no. 7 (2018): e49-e55. <https://doi.org/10.1016/j.ajic.2018.02.018>
2. Chun-Chieh Tseng & Chih-Shan Li (2007) Inactivation of Viruses on Surfaces by Ultraviolet Germicidal Irradiation, *Journal of Occupational and Environmental Hygiene*, 4:6, 400-405, DOI: 10.1080/15459620701329012
3. Michael B. Lore, Brian K. Heimbuch, Teanne L. Brown, Joseph D. Wander, Steven H. Hinrichs, Effectiveness of Three Decontamination Treatments against Influenza Virus Applied to Filtering Facepiece Respirators, *The Annals of Occupational Hygiene*, Volume 56, Issue 1, January 2012, Pages 92–101. <https://doi.org/10.1093/annhyg/mer054>
4. Dennis J. Viscusi, Michael S. Bergman, Benjamin C. Eimer, Ronald E. Shaffer, Evaluation of Five Decontamination Methods for Filtering Facepiece Respirators, *The Annals of Occupational Hygiene*, Volume 53, Issue 8, November 2009, Pages 815–827. <https://doi.org/10.1093/annhyg/mep070>
5. William G. Lindsley, Stephen B. Martin Jr., Robert E. Thewlis, Khachatur Sarkisian, Julian O. Nwoko, Kenneth R. Mead & John D. Noti (2015) Effects of Ultraviolet Germicidal Irradiation (UVGI) on N95 Respirator Filtration Performance and Structural Integrity, *Journal of Occupational and Environmental Hygiene*, 12:8, 509-517. DOI: 10.1080/15459624.2015.1018518
6. Katelyn C. Jelden, Shawn G. Gibbs, Philip W. Smith, Angela L. Hewlett, Peter C. Iwen, Kendra K. Schmid & John J. Lowe (2017) Ultraviolet (UV)-reflective paint with ultraviolet germicidal irradiation (UVGI) improves decontamination of nosocomial bacteria on hospital room surfaces, *Journal of Occupational and Environmental Hygiene*, 14:6, 456-460. DOI: 10.1080/15459624.2017.1296231

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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



UV-BOX BENCHTOP DECONTAMINATION CHAMBERS

The Air Science product line also include the **UV-Box™ Benchtop Decontamination Chamber**. This 1.9 cu.ft. high-efficiency cabinet designed to safely decontaminate contents while providing a safe work environment for the operator. High intensity UV lamps positioned within the cabinet produce short wave ultraviolet light at 254 nm to destroy exposed surface DNA and bacteria, leaving forensic evidence or other items free of contamination prior to other tests, analysis or procedures.



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Safekeeper^{COLD}



Safekeeper COLD Evidence Refrigerator

- For Temperature Controlled Storage with Multiple Layers of Security for Pharmaceutical and Forensic Applications



Safekeeper[®] COLD



"The World's Most Extensive Selection of Containment Solutions."



CONTENTS:

- Product Overview (p.2)
- Specifications (p.3)

INTRODUCTION

When evidence must be stored below room temperature to maintain integrity, use of a household or shared refrigerator may not be satisfactory to provide uniform storage conditions or security in the chain of custody.

The Safekeeper COLD is a unique refrigerator designed to provide temperature controlled storage within a single cabinet with multiple layers of security.

APPLICATIONS

Pharmaceutical Storage \ Forensic Investigation and Processing



KEY FEATURES

Compact Footprint. The Safekeeper COLD is less than 24" wide, which allows placement in nearly any location.

Customizable Door. Reversible door with option to customize with a 304-stainless steel wrap.

100% CFC Free. Environmentally friendly design with no ozone-damaging chemicals.

PERFORMANCE ADVANTAGE

The 10.1 cu. ft. Safekeeper COLD refrigerator features nine locking interior compartments to keep evidence separated and secure. Each compartment is completely enclosed to keep contents from commingling and is protected by a combination lock with user-defined codes. Two master keys are provided in case of lost combinations or administrative overrides.

An internal blower system circulates conditioned air throughout the cabinet. Open wire shelving enhances uniformity at all storage levels. A fully automatic defrost system activates on demand to optimize performance of the refrigeration system.



CONTENTS:

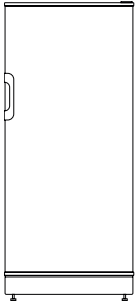
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Safekeeper^{COLD}
ALL Refrigerator

SPECIFICATIONS

FRONT VIEW



TOP VIEW



Options and Accessories

- Optional 304 stainless steel door wrap.

MODEL	VOLUME	DIMENSIONS		WEIGHT (LBS/KG)	
		Internal (W x D x H)	External (W x D x H)	Net	Ship
Safekeeper COLD	10.1 / 286	20.5" x 17.75" x 48.25" 520 x 450 x 1230 mm	23.63" x 23" x 55.5" 600 x 584 x 1410 mm	140 / 64	145 / 66

PRODUCT SPECIFICATIONS

COOLING SYSTEM

Safekeeper COLD

Airflow	<... Chamber air circulated through the wire shelves and along the door surface by an internal blower with positive airflow ...>
---------	--

CONSTRUCTION

Safekeeper COLD

Finish	<... Coated metal interior and exterior ...>
Door	<... White metal door, right hand swing; field reversible. Optional 304 stainless steel wrap is available. ...>
Shelves	<... 4 metal wire shelves, 9 lockable compartments ...>
Electrical	<... 115 V AC/60 Hz ...>
Temperature Indicator	<... Dial thermometer ...>
Compressor	<... 115 V AC/60 Hz; 3.0 oz. capacity (R134a refrigerant required) ...>
Leveling Feet	<... 2 ...>

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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Safekeeper^{COLD}
ALL Refrigerator

SPECIFICATIONS

WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



For details visit the [Warranty section](#) of our website.



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Evidence-Bench™



Designed for Easy Evidence Processing

- Evidence-Bench Allows For Mobile Forensic Evidence Processing in Your Lab, Garage or Evidence Room

Evidence-Bench 72



"The World's Most Extensive Selection of Containment Solutions."



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- Product Overview (p.2)
- Specifications (p.3)
- Warranty (p.4)

INTRODUCTION

The Air Science® Evidence-Bench series of laboratory work tables are designed specifically for high volume processing of forensic evidence by multiple users. Professional design and construction features offer convenience during use, cleaning and maintenance.

APPLICATIONS

Vertical laminar flow cabinets are intended for use in non-hazardous applications where user protection from biologicals or biohazardous byproducts is not required.

Forensic Investigation and Processing

AIRFLOW POD

The optional drop-in airflow pod permits efficient processing of evidence when using powders and/or chemicals.

- Based on the [Air Science Multiplex™ Filtration](#) technology, the airflow pod is a high efficiency containment system that protects the user and the environment from hazardous vapors or powders generated at the stainless steel work surface with downflow air movement.



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

- Unrestricted front and side access facilitates applications requiring complex and intensive involvement.
- The airflow pod eliminates putrid odors that may be emitted from the evidence being processed.

DESIGN FEATURES

- A. Epoxy resin work top chemical resistant
- B. Evidence kraft paper dispenser
- C. Heavy duty frame
- D. Locking wheels, heavy duty, non-marking
- E. Lower open shelf for storage
- F. Two locking supply compartments
- G. Open access from multiple sides
- H. Optional airflow pod filtration shown; see Accessories
- I. Optional 16 outlet power strip shown; see Accessories
- J. Optional magnifying lamp shown; see Accessories



EVB-72 shown with accessories.

CONTROL

The **basic control panel** is standard and includes an On/Off switch and Filter Blockage alarm.



Basic Control Panel

KEY FEATURES

- Kraft paper dispenser.
- Lockable storage compartments to secure tools.
- Open storage shelf.
- Wheels allowing the bench to be moved throughout the building wherever processing needs to take place.
- Optional airflow pod.



Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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Product Overview (p.2)

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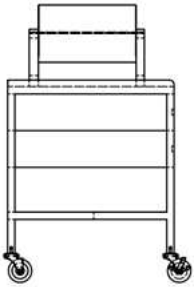
Warranty (p.4)

Evidence-Bench™

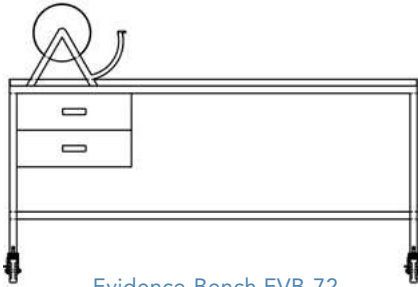
Evidence Processing

72

SPECIFICATIONS



Side View



Evidence-Bench EVB-72

MODEL	DIMENSIONS		WEIGHT (lbs/Kg)	
	External (W x D x H)	Shipping (W x D x H)	Net	Ship
EVB-72	72" x 28" x 36" 1828 x 711 x 914 mm	80" x 40" x 45" 2032 x 1016 x 1143 mm	325 / 147	400 / 182

PRODUCT SPECIFICATIONS

Filtration

EVB-72

Airflow (Optional)

<... user adjustable, up to 300cfm ...>

Construction

EVB-72

Finish

<... Epoxy coated steel frame ...>

Work Surface

<... Black epoxy resin, chemical resistant ...>

Kraft Paper Dispenser

<... Standard ...>

Locking Wheels

<... Non-marking heavy duty caster wheels ...>

Shelf

<... Standard ...>

Drawers

<... Two, key locking, left hand side mount standard ...>

OPTIONS & ACCESSORIES

Drop-In Airflow Pod	Adds operator protection from particulates or odors emitted from the work surface. Perforated stainless steel insert creates negative pressure to pass airflow over filter.	P5-24-HEAD-EVB
Magnifying Lamp	Integrated light within 7" diameter 3-diopter magnifying lens. Mounted on extension arm.	MAG-L
Power Package Outlet Strip	Front mounted power strip, 115v or 230v options available.	PSTRIP
Stainless Steel Work Surface	Available substitute for standard phenolic resin surface.	TRAY-EVB-SS
Adjustable Leveling Feet	Leveling feet replace standard casters when a fixed installation is desired.	CART-LEVEL
Cup Sink	Polyethylene cup sink (3" x 5" x 9") is fitted into the base tray. Other sizes, materials available. Contact Air Science to order.	SINK
Water Faucet	Standard 3/8" NPT hose connection. Specify location when ordering.	SF-WATER

* Factory installed. Specify when ordering.

Specifications are subject to change without notice.

Contact Air Science for custom sizes and options not listed herein.

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

STANDARDS & COMPLIANCE	
Quality Management Systems	ISO 9001:2015
Environment	ISO 14001:2015 ENERGY STAR® Partner



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