

Vented Storage Cabinets for Hazardous Chemicals and Substances

- Designed for Storage of Noxious and Odorous Evidence



Safe STORE 64T



Product



34S



34T



64T



Mini



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SafeSTORE™

Containment Solutions

34S • 34T • 64T • Mini

PRODUCT OVERVIEW

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INTRODUCTION

Safe STORE™ Vented Chemical Storage Cabinets are useful for storage of noxious or odorous chemicals. These cabinets minimize health and environmental risks in handling chemical vapors and residues, VOCs and general laboratory functions. The Air Science® Multiplex™ Filtration System protects the safety of personnel during use, maintenance and decontamination.

APPLICATIONS

The Safe STORE Series of vented filtering storage cabinets offers an economical solution for chemical storage in the laboratory. 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 Safe STORE Vented Chemical 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 vented chemical 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.



Safe STORE 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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DESIGN FEATURES

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Safe STORE 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 I.D. Window:** A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.
- E. Construction:** The standard size and tall cabinets feature all polypropylene construction, while the Safe STORE Mini features epoxy-coated steel 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: Safe STORE 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 Safe STORE 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

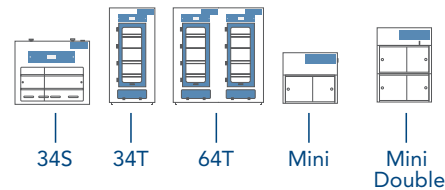
Professional quality Air Science Safe STORE Vented Chemical Storage Cabinets comply with current technical and safety regulations.

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

Vented chemical storage cabinets are available in 5 standard sizes, in metal or polypropylene construction, totaling 10 standard models.



Safe STORE Mini

Safe STORE Mini Double

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PERFORMANCE & SELECTION

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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 TECHNOLOGY

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FILTRATION

At the heart of the Safe STORE 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 vented chemical 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

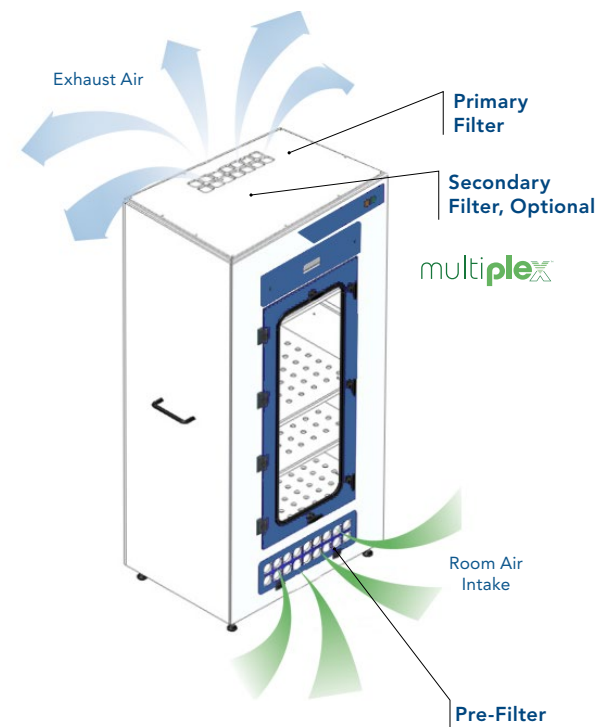
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

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.

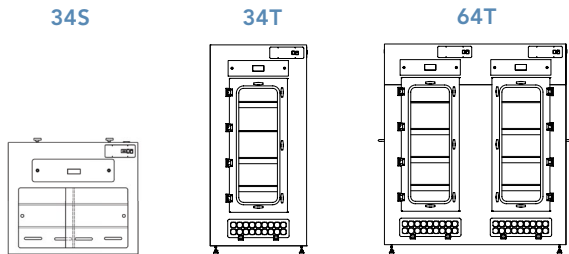
The main filters are easy to replace with no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

⚠ 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
Safe STORE					
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
Safe STORE Mini					
Mini Single	10.8" / 275 mm	21" x 12" x 20" / 538 x 305 x 504 mm	24" x 22" x 18" / 610 x 559 x 457 mm	29 / 14	74 / 34
Mini Double	10.8" / 275 mm	21" x 12" x 31" / 538 x 305 x 784 mm	24" x 22" x 36" / 610 x 559 x 914 mm	45 / 20	90 / 41

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PRODUCT SPECIFICATIONS

Filtration	34S	34T 64T	Mini Single Mini Double
Airflow	<... Upflow. ...>		
Construction	34S	34T 64T	Mini Single Mini Double
Finish	<... Polypropylene. ...>		Epoxy coated steel.
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.	Sliding.

FILTER SPECIFICATIONS

Safe STORE Model	34S	34T 64T	Mini Single Mini Double
Secondary/Stacked Filter, Optional*	(1)	(1)	(2)
Primary Filter*	(1)	(1)	(2)
Pre-Filter*	(1)	(1)	(2)

* 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

Safe STORE Model		34S	34T 64T	Mini Single Mini Double
HEPA Filter (Safe STORE 64T requires 2 filters)	A self-contained filter designed to physically capture particles larger than 0.3 microns.	ASTS-030	ASTS-030	AP60-030
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	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	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

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



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

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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